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COOPERATIVE RURAL HEALTH WORK OF THE PUBLIC HEALTH SERVICE IN THE FISCAL YEAR 1924.[1]

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In the fiscal year ended June 30, 1924, the United States Public Health Service cooperated in demonstration projects in rural health work in 72 counties, or districts comparable to counties, in 16 States, as follows:

Alabama.—Calhoun, Colbert, Franklin, Lauderdale, Limestone, Madison, Talladega, and Walker Counties.

California.—San Joaquin district.

Georgia.—Clarke, Decatur, Floyd, Glynn, Laurens, Miller, Seminole, and Walker Counties.

Iowa.—Dubuque County.

Kansas.—Cherokee County.

Kentucky.—Mason County.

Louisiana.—DeSoto and Washington Parishes.

Massachusetts.—Cape Cod district.

Mississippi.—Harrison and Washington Counties.

Missouri.—Dunklin, Gentry, Greene, New Madrid, Nodaway, Pettis, Polk, and St. Francois Counties.

Montana.—Cascade and Lewis and Clark Counties.

New Mexico.—Bernalillo, Chaves, Colfax, Eddy, McKinley, Santa Fe, Union, and Valencia Counties.

North Carolina.—Edgecombe, Sampson, and Surry Counties.

Oklahoma.—Ottawa County.

Virginia.—Arlington, Caroline, Carroll, Charlotte, Chesterfield, Grayson, Greene, Greensville, Henry, Madison, Mathews, Nansemond, Prince Edward, Pulaski, Roanoke, Smyth, Spotsylvania, Stafford, and Wise Counties.

West Virginia.—Hancock, Harrison, Logan, Marion, Preston, and Taylor Counties.

[1] This report applies to work in rural sanitation which is conducted in support of and as a part of whole-time local official health service. It does not include all cooperative activities of the Public Health Service in rural communities.

The results were entirely in support of the conclusions in the reports on this activity in the fiscal years 1920,[2] 1921,[3] 1922,[4] and 1923.[5]

Plan of Work.

The plan of the work was identical with that carried out in the four preceding fiscal years and is described in previous reports. (Reprints Nos. 615, 699, and 887.) The appropriation for the support of this activity is "for special studies of and demonstration work in rural sanitation." In each demonstration project the rural sanitation work is made a part of a well-rounded, comprehensive program of health work, and is conducted in cooperation with the State and local health authorities. Such a program of health work can be carried out on the cooperative basis in most rural counties in the United States at a cost to each county readily within its means, and in accordance with what logically should be its desires for public health service. The projects furnish a remarkable example of efficiency with economy in public service. By having all salient branches of health work for the community conducted under the direction of one head, the whole-time county health officer, who is given a status of field agent in the United States Public Health Service and in some of the States that of deputy State health officer, a maximum of service can be rendered with a minimum of overhead expense. By good business management, every dollar invested in the enterprise can be made to yield a remarkable dividend in the protection and promotion of human health and in a money saving to the community amounting to many times over the cost of the service. No radical change in the plan appears advisable; but the provision of adequate means to enable a reasonable extension would be highly advantageous and is urgently important from every standpoint—individual, community, State, and national.

Expenditures.

The appropriation for the rural health work of the Public Health Service in the fiscal year 1924 was $50,000. At the termination of the fiscal year 1923, $10,817.82 remained unexpended under contracts made during that year. Thus, $60,817.82 was available for the support of the activity in the fiscal year 1924. Of this sum, $43,584.52 was expended in allotments for cooperative projects in counties and $4,463.55 was expended for administration, supervision of local projects, and special studies of the problem of rural sanitation.

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[2] Reprint No. 615, from Public Health Reports of Oct. 1, 1920, p. 15.
[3] Reprint No. 699, from Public Health Reports of Oct. 7, 1921, p. 17.
[4] Reprint No. 788, from Public Health Reports of Sept. 29, 1922, p. 22.
[5] Reprint No. 887, from Public Health Reports of Dec. 14, 1923, p. 24.

The unexpended balance of the total sum available was included in allotments to some of the cooperative projects which, because of various local circumstances, could not be completed by the end of the fiscal year. With the existing differences between the Federal fiscal year and the fiscal years of some of the States and localities in which the work is done, it would not be practicable, without lessening the degree of economy striven for, to arrange contracts so that the allotment of Federal funds to every project would be expended exactly by the end of the Federal fiscal year.

The total expenditure for the support of the 72 local projects was $583,791.73 in the fiscal year 1924. Of this sum, an aggregate of $465,185.09 was provided from State, county, and municipal governmental sources; $75,022.12 came from civic sources, such as local health associations, local Red Cross chapters, and the International Health Board; and $43,584.52 came from the rural sanitation funds of the Public Health Service. Thus, this investment of Federal funds was met with odds of over 12 to 1. The proportion of the expenses covered with funds from local sources is significant; it gives some idea of the stimulating effect of the cooperation of the Federal Government in this vitally important, nation-wide field.

The expenditures from the different sources for the support of the projects, the scope, the principal activities, and some of the results of the work are presented in the accompanying tabular statement.

Compilation of data, by counties, on cooperative demonstration work in rural sanitation in fiscal year 1924.

Counties (or districts)	Arlington, Va.	Bernalillo, N. Mex.	Calhoun, Ala.	Cape Cod Health District, Mass.	Cascade, Mont.	Chaves, N. Mex.	Cherokee, Kans.	Clarke, Ga.	Colbert, Ala.	Colfax, N. Mex.
Period of work in fiscal year 1924	July 1, 1923, to Jan. 31, 1924.	Jan. 1, 1924, to June 30, 1924.	Mar. 1, 1924, to June 30, 1924.	July 1, 1923, to June 30, 1924.	July 1, 1923, to June 30, 1924.	Feb. 1, 1924, to June 30, 1924.	July 1, 1923, to June 30, 1924.	July 1, 1923, to June 30, 1924.	July 1, 1923, to June 30, 1924.	Feb. 1, 1924, to June 30, 1924.
Expenditures:										
(*a*) Rural-sanitation fund (P. H. S.)	$175.00	$150.00	$293.32	$2,499.96	$2,020.00	$136.35	$300.00	$1,460.00	$600.00	$150.00
(*b*) State	583.34		1,340.00						3,490.00	1,050.00
(*c*) County	11,024.96	5,254.09	1,939.08		8,211.28	2,887.05	9,038.97	7,244.54	4,214.13	2,460.00
(*d*) Municipalities			1,233.32	5,337.51	8,211.27		2,128.59	4,416.95	600.00	
(*e*) Other agencies	1,399.98		800.00		1,320.00	1,095.00	5,140.87	2,099.08	650.00	
Total	13,183.28	5,404.09	5,605.72	7,837.47	19,762.55	4,118.40	16,608.43	15,220.57	9,554.13	3,660.00
1. Educational:										
(*a*) Lectures	13	28	16	138	61	241	103	170	129	27
(*b*) Attendance at lectures	1,150	1,170	509	1,957	3,006	7,173	6,620	6,144	8,080	1,861
(*c*) Bulletins distributed	382	205	1,329	1,382	5,590	50	8,641	6,040	4,812	126
(*d*) Newspaper articles	27	168	11	21	44	9	114	12	43	21
2. Sanitary inspections:										
(*a*) Private premises	4,108	3,421	1,487	109		167	240	7,434	1,737	217
(*b*) Schools, churches, stores	331	933	82	156	636	132	308	202	246	13
3. Special inspections:										
(*a*) Dairies	42	48	34	2,072	206	92	12	98	17	5
(*b*) Other food-product places	214	523	2,312	453	232	2	169	684	353	9
4. Life-extension examinations	87		38		50				129	
5. Acute communicable disease control:										
(*a*) Visits to cases, contacts, suspects	1,021	3,748	577	849	4,097	1,550	150	1,183	375	309
(*b*) Cases quarantined	598	452	37	465	1,881	559	725	780	152	188
6. Venereal-disease control:										
(*a*) Suspects examined		15	63	4	34			69	7	18
(*b*) Prophylactic treatments							4			30
(*c*) Curative treatments		329	125	5	116		14	48		25
7. Tuberculosis control:										
(*a*) Number examined	54		104	36	133		138	547	84	
(*b*) Positive	18		17	8	69		48	216	71	
(*c*) Negative	36		87	28	64		90	331	13	
(*d*) Placed in institutions	3			2	5	1	6	7	1	
(*e*) Home visits	2,182		186	178	296	6	609	1,143	78	
8. Persons treated for removal of hookworm			5						4	
9. Schick tests	820						4	4		
10. Cows tuberculin tested	1,060	118	13	705		166	519	2,312		
11. Immunization:										
(*a*) Complete antityphoid inoculations	14	7	265	4	105		1,342	159	958	
(*b*) Antismallpox vaccinations	93	807	71		244		32	2,760		1,061
(*c*) Complete diphtheria toxin-antitoxin inoculations	312	165	12	10	968		4	84		642

12. Antimalaria work	(1)	(1)	(2)	(1)	(1)	(1)	(1)	(2)	(2)	(2)
13. Child hygiene:										
Prenatal—										
(a) Cases given advice	27	9	18	3	9	27	245	2	260	9
(b) Examinations	8	9	18		42					
(c) Office consultations	3		45		34		29		28	4
(d) Home visits	42	9	233	29	8	41	368	9	663	19
Infant and preschool—										
(a) Babies and children examined	708	115	373	5	556	135	344	811	785	35
(b) Examinations	3,770	115	373	6	583	135	344	811	785	35
(c) Office consultations, mothers	143		36	2	114		85	67	64	
(d) Group conferences with mothers	28	6					8	4	153	
(e) Home visits	520	91	860	264	327	713	552	180	544	52
School—										
(a) Children examined	1,819	842	310	7,495	6,006	921	189	2,801	3,838	574
(b) Found defective	540	78	222	1,693	5,103	498	181	1,950	1,947	127
(c) Defects found	2,160	91	284	2,566	9,518	630	201	2,870	2,501	117
(d) Consultations, parents (office and school)	75	86	35	31	37	195	545	78	60	52
(e) Home visits	27	218	657	1,460	75	1,066	861	619	532	
Nutritional classes—										
(a) Cases attending	258						27			
14. Laboratory examinations:										
Positive	228	77	234	2	273	77	29	146	162	1
Negative	210	1,851	946	149	1,299	178	35	443	406	2
Total	438	1,928	1,180	151	1,572	255	64	589	568	3
15. Results:										
(a) Sanitary privies installed—										
Septic or L. R. S			4	2		1	2		3	
Water-tight vault							18			
Bucket and box	152		1				76	7	49	
Pit		136	83	2		5	107	150	94	
Total	152	136	87	5		6	203	157	146	
(b) Privies restored to sanitary type	50	84		3		21	122	68	24	11
(c) Septic tanks installed	201		4					5		
(d) New sewer connections		83	308	7	70	8	71	153	102	10
(e) New water connections	28	133	194	5	32		71	92	32	
(f) Wells improved	51	42	3	1			101		3	
(g) Springs improved		1	1				2			
(h) Public milk supplies radically improved	6	3				6	4		2	
(i) Treatments induced for correction physical defects school children	1,856	5	24	2,000	29	110	1,255	726	741	
(j) Nutritional cases improved	258								235	
(k) Convictions for violation sanitary laws	420	4			1	1		7	11	10
(l) Nuisances corrected	854	1,102	49	17	313	71	202	525	42	51

[1] None. [2] Considerable. [3] Little.

Compilation of data, by counties, on cooperative demonstration work in rural sanitation in fiscal year 1924—Continued.

Counties (or districts)	Decatur, Ga.	De Soto Parish, La.	Dubuque, Iowa	Dunklin, Mo.	Eddy, N. Mex.	Edgecombe, N. C.	Floyd, Ga.	Franklin, Ala.	Gentry, Mo.	Glynn, Ga.
Period of work in fiscal year 1924	June 1, 1924, to June 30, 1924	June 1, 1924, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	May 1, 1924, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	Jan. 1, 1924, to June 30, 1924	July 1 to 31, Nov. 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924
Expenditures:										
(a) Rural sanitation fund (P. H. S.)	$63.34	$50.00	$300.00	$565.00	$150.00	$954.96	$300.00	$150.00	$450.00	$300.00
(b) State	83.33	400.98		1,130.00		999.97		1,133.34	900.00	
(c) County	127.49	400.99	4,906.56	3,541.28	761.66	5,444.76	7,381.19	2,595.30	2,581.07	11,360.26
(d) Municipalities		103.50	11,514.92							400.00
(e) Other agencies			2,200.00	1,800.00	200.00	142.17	2,350.00	750.00	1,275.00	
Total	274.16	955.47	18,921.48	7,036.28	1,111.66	7,541.86	10,031.19	4,628.64	5,206.07	12,060.26
1. Educational:										
(a) Lectures		8	52	215		20	3	37	145	80
(b) Attendance at lectures		697	3,223	10,900		697	350	2,225	4,052	4,880
(c) Bulletins distributed	200	82	8,509	3,885	1,046	135	5,265	2,090	1,123	11,662
(d) Newspaper articles	4		226	136	30	2	23	28	95	46
2. Sanitary inspections:										
(a) Private premises	98	243	1,199	76		1,996	80	4,402	13	1,695
(b) Schools, churches, stores	2	23	1,142	97		317	50	19	70	227
3. Special inspections:										
(a) Dairies		4	180	9	35	39	42	4		379
(b) Other food-product places		3	727	2	15	305		62		787
4. Life extension examinations	52	3				147		35	67	
5. Acute communicable disease control:										
(a) Visits to cases, contacts, suspects	8	5	750	87	16	118	244	425	66	3,646
(b) Cases quarantined		4	174	33		209	242	369	128	899
6. Venereal-disease control:										
(a) Suspects examined	5		99			47	109	8		435
(b) Prophylactic treatments							23			
(c) Curative treatments			439			202	914	2		461
7. Tuberculosis control:										
(a) Number examined		1	332	75		143	13	13	7	44
(b) Positive			18	18		53	3	3	4	3
(c) Negative		1	314	57		90	10	10	3	41
(d) Placed in institutions			10	7		28	2			2
(e) Home visits		3	61	46		172	44	11	6	261
8. Persons treated for removal of hookworm	7	2				4		93		95
9. Schick tests			39						524	
10. Cows tuberculin tested			2,017		67	5	684			140

11. Immunization:										
(a) Complete antityphoid inoculations	70		5	416		990	2,309	495	3	1,830
(b) Antismallpox vaccinations	2	1		41		553	1,654	1	10	674
(c) Complete diphtheria toxin-antitoxin inoculations			62	87		14	66		272	1
12. Antimalaria work	(2)	(2)	(1)	(2)	(1)	(3)	(1)	(3)	(1)	(3)
13. Child hygiene:										
Prenatal—										
(a) Cases given advice	2		121	20	21	24		34		314
(b) Examinations	2		9					10		4
(c) Office consultations	5			2	8	7		9		27
(d) Home visits			399			61	67	39		122
Infant and preschool—										
(a) Babies and children examined	7	2	149	350	5	140		16	189	295
(b) Examinations	9	2	152	350	5	140		16	205	295
(c) Office consultations, mothers	15	8		100	5	22	9	37	182	186
(d) Group conferences with mothers		4	51	6		35		7		5
(e) Home visits		26	1,161	113	3	53	34	120	99	1,003
School—										
(a) Children examined			6,447	6,154	139	1,530	5,227	1,861	2,127	2,641
(b) Found defective			4,223	4,471	21	474	1,816	1,328	1,074	1,750
(c) Defects found			6,074	6,391	35	474	2,273	3,146	1,424	2,623
(d) Consultations, parents (office and school)	21		984	188	5			59	242	518
(e) Home visits			1,913	32	3	1	1,264	136	221	1,475
Nutritional classes—										
(a) Cases attending			281	14					520	
14. Laboratory examinations:										
Positive	18	4	710	6	8	96	47	286	15	196
Negative	30	4	3,118	23	21	318	230	421	247	573
Total	48	8	3,828	29	29	414	277	707	262	769
15. Results:										
(a) Sanitary privies installed—										
Septic or L. R. S.							3			18
Water-tight vault			2							
Bucket and box				2			42	9		
Pit		12	15	18	2	230	35	220	1	
Total		12	17	20	2	230	80	229	1	18
(b) Privies restored to sanitary type		22	85			606	47	6		115
(c) Septic tanks installed			29					2		12
(d) New sewer connections		1	431			18				6
(e) New water connections			531					180		
(f) Wells improved			14					1		1
(g) Springs improved										
(h) Public milk supplies radically improved			41							26
(i) Treatments induced for correction physical defects school children		1	1,541	217		8	915	52	200	343
(j) Nutritional cases improved			287							15
(k) Convictions for violation sanitary laws			664			81				
(l) Nuisances corrected		74			22	285	106	21	2	119

[1] None. [2] Considerable. [3] Little.

Compilation of data, by counties, on cooperative demonstration work in rural sanitation in fiscal year 1924—Continued.

Counties (or districts)	Greene, Mo.	Hancock, W. Va.	Harrison, Miss.	Harrison, W. Va.	Lauderdale, Ala.	Laurens, Ga.	Lewis and Clark, Mont.	Limestone, Ala.	Logan, W. Va.	Madison, Ala.
Period of work in fiscal year 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	Mar. 1, 1924, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	Jan. 1, 1924, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924
Expenditures:										
(*a*) Rural sanitation fund (P. H. S.)	$504.84	$1,299.96	$1,200.00	$350.00	$1,174.93	$300.00	$2,400.00	$150.00	$606.86	$1,899.99
(*b*) State	1,800.00	999.96	1,508.30		2,050.00			1,100.02	1,900.00	2,859.97
(*c*) County	10,420.00	3,907.31	14,702.06	3,658.66	4,569.73	3,900.00	2,038.13	2,446.60	8,304.10	6,469.91
(*d*) Municipalities			2,247.80		1,500.00		2,038.13			5,868.33
(*e*) Other agencies	4,200.00	999.96	524.49	317.59	3,188.50		1,590.00	750.00	100.00	4,543.35
Total	16,924.84	7,207.19	20,182.65	4,326.25	12,483.16	4,200.00	8,066.26	4,446.62	10,910.96	21,641.55
1. Educational:										
(*a*) Lectures	208	257	134	179	185	209	12	60	123	205
(*b*) Attendance at lectures	5,803	9,577	8,777	2,800	7,970	5,187	160	3,467	4,915	16,689
(*c*) Bulletins distributed	16,450	1,120	16,486	2,783	6,464	6,906	3,450	2,930	3,776	7,680
(*d*) Newspaper articles	141	232	420	5	50	197	112	6	30	342
2. Sanitary inspections:										
(*a*) Private premises	33	472	5,999	115	3,155	259	320	1,020	11,528	33,954
(*b*) Schools, churches, stores	91	62	1,134	15	176	240	215	120	143	156
3. Special inspections:										
(*a*) Dairies		1	118	16	92	70	271		53	661
(*b*) Other food-product places		68	141	5	577	186	227	72	63	1,186
4. Life extension examinations	70		27		425	82		35		236
5. Acute communicable disease control:										
(*a*) Visits to cases, contacts, suspects	1,423	89	1,240	14	1,465	285	2,452	564	1,096	341
(*b*) Cases quarantined	388	208	627	26	800	169	755	376	229	122
6. Venereal disease control:										
(*a*) Suspects examined	262	1	68	10	163	157	7	34	7	722
(*b*) Prophylactic treatments						77				
(*c*) Curative treatments	3,498		160	56	98	190			20	4,069
7. Tuberculosis control:										
(*a*) Number examined	115	1	65	5	192	59	20	22	4	53
(*b*) Positive	52	1	50	5	38	18	9	5	4	11
(*c*) Negative	63		15		154	41	11	17		42
(*d*) Placed in institutions	36	1	4	5	4	11	6		11	
(*e*) Home visits	372	14	79	7	117	45	150	39	103	175
8. Persons treated for removal of hookworm			156		8	346				
9. Schick tests			138			170	4			
10. Cows tuberculin tested			295	61	70	35	27		136	3,077

11. Immunization:										
(a) Complete antityphoid inoculations	143		15	35	801	3,782		33	325	1,689
(b) Antismallpox vaccinations		649	47	95	6	230	104		77	970
(c) Complete diphtheria toxin-antitoxin inoculations	8	79	12		49	113			32	
12 Antimalaria work	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
13 Child hygiene:										
Prenatal—										
(a) Cases given advice	199		188	14	97	174	30	60	168	491
(b) Examinations	5		171		5	172	13	10		
(c) Office consultations	6		11		7	123	16	2		
(d) Home visits	198		180	12	132	131	77	85	259	657
Infant and preschool—										
(a) Babies and children examined	1,168	193	1,056	132	1,074	164	220	778	1,162	2,286
(b) Examinations	1,168	193	1,056	132	1,074	164	500	861	1,162	2,286
(c) Office consultations, mothers	1,177	39	86	1	69	91	500	47	2	218
(d) Group conferences with mothers		18	2	16	124	45		2	9	106
(e) Home visits	2,819	139	1,053	34	1,142	87	303	460	3,226	3,085
School—										
(a) Children examined	3,482	4,294	938	1,006	5,857	4,584	2,278	3,089	10,277	7,431
(b) Found defective	2,609	3,344	639	830	3,468	3,333	1,125	2,068	5,108	5,693
(c) Defects found	4,732	5,214	1,009	2,011	6,086	3,890	3,793	3,513	6,528	13,703
(d) Consultations, parents (office and school)	628	138	1,095	47	77	190	279	140		103
(e) Home visits	1,695	314	1,305	40	1,103	191	461	367		197
Nutrition classes—										
(a) Cases attending	30		134			780	400	20		50
14. Laboratory examinations:										
Positive	179		276	2	422	418	240	153	65	891
Negative	401	1	310	15	1,519	752	605	565	56	2,736
Total	580	1	586	17	1,941	1,170	845	718	121	3,627
15. Results:										
(a) Sanitary privies installed—										
Septic or L. R. S			4				34		2	109
Water-tight vault	1									
Bucket and box	2				62	4		4		275
Pit	2	16	44	7	114	200		64	124	351
Total	5	16	48	7	176	204	34	68	126	735
(b) Privies restored to sanitary type	5		841	19	78	130	11		22	1,157
(c) Septic tanks installed	2	2	80		22	1	2	1		
(d) New sewer connections		10		1	170	79	30	16	25	708
(e) New water connections			63		111	74	25	10	40	51
(f) Wells improved	1		1	6	20	0	29	3	146	172
(g) Springs improved					2	17		2		14
(h) Public milk supplies radically improved			65	8		27	81			37
(i) Treatments induced for correction physical defects school children	1,067	2,937	116	225	369	804	43	265	149	1,873
(j) Nutritional cases improved	609		79	33		460		213		
(k) Convictions for violation sanitary laws		1	34	3	3	11	3	12	4	98
(l) Nuisances corrected	26	79	6	17	434	157	215	97	662	2,737

Compilation of data, by counties, on cooperative demonstration work in rural sanitation in fiscal year 1924—Continued.

Counties (or districts)	Marion, W. Va.	Mason, Ky.	McKinley, N. Mex.	Miller, Ga.	Nansemond, Va.	New Madrid, Mo.	Nodaway, Mo.	Ottawa, Okla.	Pettis, Mo.	Polk, Mo.
Period of work in fiscal year 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	Mar. 1, 1924, to June 30, 1924	June 1, 1924, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924
Expenditures:										
(a) Rural sanitation fund (P. H. S.)	$900.00	$1,470.00	$120.00	$83.33	$212.50	$600.00	$600.00	$300.00	$600.00	$575.00
(b) State		1,887.05	833.32	83.34	2,317.58	1,800.00	1,800.00	1,000.00	900.00	1,800.00
(c) County	5,443.68	3,774.11	999.25	154.16	4,635.21	3,600.00	5,981.40	2,820.00	2,291.77	3,520.00
(d) Municipalities		800.00			2,317.58					
(e) Other agencies		1,237.06	600.00		2,317.64	1,200.00	1,875.00	4,580.04	6,699.51	1,200.00
Total	6,343.68	9,198.22	2,552.57	320.83	11,800.51	7,200.00	10,256.40	8,700.04	10,491.28	7,095.00
1. Educational:										
(a) Lectures	38	362	69		49	129	194	120	141	90
(b) Attendance at lectures	2,769	9,370	2,540		2,907	6,840	5,981	2,080	3,366	3,570
(c) Bulletins distributed	13,442	2,426	3,424	150	4,543	3,350	13,334	930	6,166	3,620
(d) Newspaper articles	47	297	6	1	172	200	142	69	308	331
2. Sanitary inspections:										
(a) Private premises	518	432	47	152	589	8	445	161	13	38
(b) Schools, churches, stores	97	484	10	2	2,407	60	189	99	88	96
3. Special inspections:										
(a) Dairies	3	183	2		32			60	3	1
(b) Other food-product places	5	1,363	9		263			53	2	62
4. Life extension examinations	31					131			37	251
5. Acute communicable disease control:										
(a) Visits to cases, contacts, suspects	250	192	510	16	324	336	724	139	214	713
(b) Cases quarantined	282	72	191		143	17	720	89	152	415
6. Venereal disease control:										
(a) Suspects examined	38	125	1		8	77		162	203	10
(b) Prophylactic treatments						6		24	4	
(c) Curative treatments	213	298				103		128	1,439	6
7. Tuberculosis control:										
(a) Number examined	43	83	1		274	36	3	56	24	74
(b) Positive	23	19	1		83	33	3	48	14	42
(c) Negative	20	64			191	3		8	10	32
(d) Placed in institutions	22	2	1		20	11	4	7	4	7
(e) Home visits	8	396			266	16	3	49	180	63
8. Persons treated for removal of hookworm				32	2					
9. Schick tests					104				13	188
10. Cows tuberculin tested		1,650	13		182		2,900	257		

11. Immunization:										
(a) Complete antityphoid inoculations		10	75		3	38		174	55	388
(b) Antismallpox vaccinations	65		185		1,720	2		1,157	111	270
(c) Complete diphtheria toxin-antitoxin inoculations		13			230	190		67	1,671	143
12. Antimalaria work	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
13. Child hygiene:										
Prenatal—										
(a) Cases given advice	7	110	10		71	27	88	150	56	17
(b) Examinations	8	145	10			4		103		7
(c) Office consultations	8	79				8	11	70	2	6
(d) Home visits	5	275			71	15	89	66	75	12
Infant and preschool—										
(a) Babies and children examined	160	297	195		154	415	259	124	439	216
(b) Examinations	160	386	195		154	415	259	127	439	216
(c) Office consultations, mothers	35	134	1	25	1	435	182	49	107	212
(d) Group conferences with mothers	2	16	49		9	1		53	79	3
(e) Home visits		595			191	123	376	57	639	110
School—										
(a) Children examined	1,248	2,985	1,073		7,730	2,955	2,901	4,769	2,591	2,042
(b) Found defective	951	916	635		3,751	2,432	2,441	2,724	1,545	1,160
(c) Defects found	1,349	1,425	794		4,904	4,091	5,071	3,130	2,781	1,734
(d) Consultations, parents (office and school)	326	330		10		748	155	67	371	212
(e) Home visits	264	749	280		970	268	303	43	392	170
Nutrition classes—										
(a) Cases attending					52			163		
14. Laboratory examinations:										
Positive	94	125	12	38	97	32	10	48	88	117
Negative	37	181	2	128	171	20	19	27	194	287
Total	131	306	14	166	268	52	29	75	282	404
15. Results:										
(a) Sanitary privies installed—										
Septic or L. R. S	14	7			2	15		29	2	
Water-tight vault	2				2			9		8
Bucket and box	5				45					
Pit	10				314	12	58	17	5	17
Total	31	7			363	27	58	55	7	25
(b) Privies restored to sanitary type	86	83	27		1,500	2	5	119	7	5
(c) Septic tanks installed		2			4			1	2	3
(d) New sewer connections	5	84			137		8	18		
(e) New water connections	1	21					8	33		
(f) Wells improved	9	70			7		21		18	7
(g) Springs improved	6									1
(h) Public milk supplies radically improved		7			1			43		
(i) Treatments induced for correction physical defects school children	7	602			597	1,186	547	227	338	176
(j) Nutritional cases improved			85		52	22		139	104	77
(k) Convictions for violation sanitary laws								12		
(l) Nuisances corrected	94	354			469			80	8	87

Compilation of data, by counties, on cooperative demonstration work in rural sanitation in fiscal year 1924—Continued.

Counties (or districts)	Preston, W. Va.	St. Francois, Mo.	Sampson, N. C.	San Joaquin District, Calif.	Santa Fe, N. Mex.	Seminole, Ga.	Surry, N. C.	Talladega, Ala.	Taylor, W. Va.	Union, N. Mex.
Period of work in fiscal year 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	June 1, 1924, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924
Expenditures:										
(*a*) Rural sanitation fund (P. H. S.)	$962.50	$600.00	$300.00	$300.00	$900.00	$83.33	$300.00	$1,997.36	$458.29	$782.70
(*b*) State	3,337.73	3,000.00	2,499.96	1,800.00		83.33	1,234.00	3,022.56	1,771.32	
(*c*) County	5,786.68	5,130.19	3,000.00	69,315.14	4,298.10	154.16	5,505.59	5,097.12	5,083.49	6,570.76
(*d*) Municipalities								1,980.07		
(*e*) Other agencies	1,497.02	9,047.84		1,800.00				1,647.02	1,725.00	450.00
Total	11,583.93	17,778.03	5,799.96	73,215.14	5,198.10	320.82	7,039.59	13,744.13	9,038.10	7,803.46
1. Educational:										
(*a*) Lectures	304	154	46	280	39	6		60	251	162
(*b*) Attendance at lectures	9,594	10,877	3,374	13,060	1,823	555		2,288	2,840	3,798
(*c*) Bulletins distributed	4,695	8,734	2,042	45,543	711	150		8,800	5,221	5,620
(*d*) Newspaper articles	34	98	11	451	73			39	75	82
2. Sanitary inspections:										
(*a*) Private premises	1,486	1,512		2,849	163	264	5	1,345	70	363
(*b*) Schools, churches, stores	182	180	31	585	65	15	1	146	63	65
3. Special inspections:										
(*a*) Dairies	6	11		3,953	24		7	17	19	2
(*b*) Other food-product places	97	87	16	6,509	21	9	5	353	53	1
4. Life extension examinations	193	8	5	18,784		5	20	94		3
5. Acute communicable disease control:										
(*a*) Visits to cases, contacts, suspects	427	1,894	341	9,035	259		98	301	586	1,091
(*b*) Cases quarantined	279	771	1,929	431	259		507	38	379	699
6. Venereal disease control:										
(*a*) Suspects examined	26	76	189	916	21			191	48	14
(*b*) Prophylactic treatments		2		1	1			5		
(*c*) Curative treatments	16	582	781	11,366	2			738	74	43
7. Tuberculosis control:										
(*a*) Number examined	18	65	81	80				122	65	6
(*b*) Positive	6	17	8	26				24	18	2
(*c*) Negative	12	48	73	54				98	47	4
(*d*) Placed in institutions		1	3	20				6	4	1
(*e*) Home visits	10	90	4	105			1	67	12	11
8. Persons treated for removal of hookworm			90					3		
9. Schick tests		6		684						
10. Cows tuberculin tested					13		1,300	735	189	

11. Immunization:										
(a) Complete antityphoid inoculations	242	100	2,868	753	50		2,642	1,928	376	21
(b) Antismallpox vaccinations	223	2,188	1,221	2,385	730		801	177	372	854
(c) Complete diphtheria toxin-antitoxin inoculations	156	183	153	3,839	843		595		2	872
12. Antimalaria work	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
13. Child hygiene:										
Prenatal—										
(a) Cases given advice	52	15	39	421	69		78	129	102	41
(b) Examinations		1	17	603	20			20		
(c) Office consultations	8	188	45	565	23			15	1	2
(d) Home visits	30	5	25	249	41		18	142	99	44
Infant and preschool—										
(a) Babies and children examined	379	193	123	2,007	144		12	1,684	39	280
(b) Examinations	599	193	123	2,750	147		12	1,909	39	280
(c) Office consultations, mothers	97	123	190	1,932	24			104	1	79
(d) Group conferences with mothers	9	11		68	1			196		
(e) Home visits	256	180	53	5,119	163		70	1,459	115	71
School—										
(a) Children examined	2,678	4,338	135	28,287	1,708		3,929	4,909	4,681	1,689
(b) Found defective	1,689	3,435	135	10,025	160		1,879	3,070	3,885	926
(c) Defects found	2,603	4,637	137	14,802	213		1,879	4,723	4,744	1,344
(d) Consultations, parents (office and school)	69	359	168	1,667	99			150	205	231
(e) Home visits	383	253	40	9,407	286			431	726	46
Nutrition classes—										
(a) Cases attending	125	264						29	876	48
14. Laboratory examinations:										
Positive	210	160	295	606	129	4		308	95	65
Negative	701	1,089	681	3,002	130	47		1,439	74	313
Total	911	1,249	976	3,608	259	51		1,747	169	378
15. Results:										
(a) Sanitary privies installed—										
Septic or L. R. S	24	20			2			8	8	
Water-tight vault	23	8			2					1
Bucket and box	80	2						160		
Pit	142	140	23	50	45		235	257	17	18
Total	269	170	23	50	49		235	425	25	19
(b) Privies restored to sanitary type	122	104	1	4	42			162		124
(c) Septic tanks installed	12	11		5	2			9		
(d) New sewer connections	107	65		920	27			179	13	
(e) New water connections	48	12	1	668	45		224	165	2	
(f) Wells improved	121	14	1	9	9			15		15
(g) Springs improved	20	2			1		2	3		
(h) Public milk supplies radically improved					4					
(i) Treatments induced for correction physical defects school children	253	2,906	62	6,475	31		2,106	973	512	282
(j) Nutritional cases improved	78	1,003		526	18			20	277	
(k) Convictions for violation sanitary laws	2			15	5			7	3	
(l) Nuisances corrected	167	110	3	348	153			560	56	71

Compilation of data, by counties, on cooperative demonstration work in rural sanitation in fiscal year 1924—Continued.

Counties (or districts)	Valencia, N. Mex.	Walker, Ala.	Walker, Ga.	Washington, Miss.	Washington Parish, La	Wise, Va.	16 Virginia counties	Total
Period of work in fiscal year 1924	Jan. 1, 1924, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	Jan. 1, 1924, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	July 1, 1923, to June 30, 1924	
Expenditures:								
(a) Rural sanitation fund (P. H. S.)	$150.00	$900.00	$1,500.00	$1,200.00	$1,860.00	$300.00	$4,575.00	$43,584.52
(b) State	600.00	1,391.66		1,299.96	2,000.00		11,185.83	68,976.85
(c) County	3,448.12	4,549.92	4,412.55	3,099.96	3,211.61	12,793.07	15,963.07	342,430.27
(d) Municipalities				2,580.00	500.00			53,777.97
(e) Other agencies		1,200.00	240.00		240.00			75,022.12
Total	4,198.12	8,041.58	6,152.55	8,179.92	7,811.61	13,093.07	31,723.90	583,791.73
1. Educational:								
(a) Lectures	96	52	140	33	105	200	590	6,759
(b) Attendance at lectures	4,999	3,828	7,181	818	10,046	3,479	28,798	276,820
(c) Bulletins distributed	595	2,237	428	1,155	7,466	1,690	28,665	305,736
(d) Newspaper articles	2	16	16	54	25	106	232	5,482
2. Sanitary inspections:								
(a) Private premises	68	1,598	4,389	14,243	762	2,176	20,911	140,184
(b) Schools, churches, stores	55	153	633	1,142	153	248	740	15,327
3. Special inspections:								
(a) Dairies		18	36	22	188	75		9,252
(b) Other food-product places		592	288	12	232	80	1,902	21,391
4. Life extension examinations		29		15	14			21,103
5. Acute communicable disease control:								
(a) Visits to cases, contacts, suspects	505	426	91	245	242	50		47,202
(b) Cases quarantined	82	46	53	44	124	57	729	20,103
6. Venereal-disease control:								
(a) Suspects examined	7	45	5	637		514		5,738
(b) Prophylactic treatments		4		13				194
(c) Curative treatments		33	4	186		3,440		30,223
7. Tuberculosis control:								
(a) Number examined		65	32		2	158	155	3,703
(b) Positive		23	17			36		1,185
(c) Negative		42	15		2	122		2,363
(d) Placed in institutions		2				14		281
(e) Home visits		61	12	21	3	142		7,903
8. Persons treated for removal of hookworm		156		2	228	87		1,320
9. Schick tests			164		382	416		3,660
10. Cows tuberculin tested		250	19	200	1,364	57	542	21,178

11. Immunization:								
(a) Complete antityphoid inoculations	361	2,305	1,504	48	1,159	92	849	31,836
(b) Antismallpox vaccinations	60	684	750	1,567	134	233	732	26,803
(c) Complete diphtheria toxin-antitoxin inoculations	442	----	328	5	124	51	34	12,933
12. Antimalaria work	(1)	(2)	(3)	(3)	(3)	(1)	(3)	----
13. Child hygiene:								
Prenatal—								
(a) Cases given advice	5	114	----	171	20	195	----	4,553
(b) Examinations	1	6	----	57	----	15	----	1,495
(c) Office consultations	5	7	----	128	3	----	----	1,540
(d) Home visits	17	97	----	231	26	436	----	5,908
Infant and preschool—								
(a) Babies and children examined	68	30	5	208	143	404	----	21,231
(b) Examinations	68	30	5	208	143	404	----	26,048
(c) Office consultations, mothers	8	18	4	120	83	17	----	7,286
(d) Group conferences with mothers	5	4	----	41	32	50	----	1,258
(e) Home visits	43	70	----	186	280	1,412	----	30,631
School—								
(a) Children examined	872	4,276	2,946	2,987	1,133	5,567	----	192,586
(b) Found defective	319	3,455	1,939	1,632	939	3,924	----	109,680
(c) Defects found	409	5,360	2,604	1,632	1,884	6,427	----	172,534
(d) Consultations, parents (office and school)	62	8	----	209	105	44	----	11,503
(e) Home visits	29	3	----	247	451	870	----	32,844
Nutritional classes— (a) Cases attending	----	----	----	59	51	----	----	4,181
14. Laboratory examinations:								
Positive	15	103	46	339	238	489	----	9,024
Negative	46	163	54	675	170	1,403	----	28,517
Total	61	266	100	1,014	408	1,892	1,574	39,115
15. Results:								
(a) Sanitary privies installed—								
Septic or L. R. S	1	14	18	----	----	186	76	608
Water-tight vault	----	----	2	----	----	----	16	94
Bucket and box	----	72	3	78	8	49	404	1,591
Pit	2	437	238	10	203	201	2,933	7,416
Total	3	523	261	88	211	436	3,429	9,709
(b) Privies restored to sanitary type	----	42	89	----	6	79	1,190	7,326
(c) Septic tanks installed	----	1	28	----	9	118	441	1,011
(d) New sewer connections	----	47	211	29	75	151	486	4,869
(e) New water connections	----	62	211	38	79	172	195	3,657
(f) Wells improved	1	32	4	----	7	20	89	1,124
(g) Springs improved	----	9	7	----	----	----	81	171
(h) Public milk supplies radically improved	----	----	9	----	47	15	----	432
(i) Treatments induced for correction of physical defects in school children	25	155	224	929	342	495	43	37,364
(j) Nutritional cases improved	----	30	----	----	12	----	----	4,632
(k) Convictions for violation of sanitary laws	----	13	----	----	7	----	----	1,432
(l) Nuisances corrected	46	124	267	339	10	39	482	12,152

The Cape Cod Project.

The cooperative rural health work begun in May, 1921, under the direction of a whole-time district health officer, in 10 of the 14 towns (townships) in Cape Cod, Mass.,[6] has been continued satisfactorily. The funds provided by appropriation by the authorities of the 10 towns participating in the project and expended for the support of the work in the fiscal year 1924 aggregated $5,840, as against $5,100 provided from town sources in the first year of the activity. The survival of this cooperative project under the (New England) town system of government, wherein each town is an independent unit, is strong evidence of the practicability of the plan under widely varying conditions.

Special Demonstration Work in Virginia Counties.

The plan of special demonstration work in rural sanitation carried out in Virginia in 11 counties in the fiscal year 1920, in 10 counties in the fiscal year 1921, in 14 counties in the fiscal year 1922, and in 12 counties in the fiscal year 1923, was carried out in 16 counties [7] in that State in the fiscal year 1924. This plan, which has been described in previous reports,[8] continues to prove highly successful. After five years' trial it obviously meets remarkably well situations in rural counties in which effective health work, if begun at all, must be started on a low-cost basis, and in which out-door sanitary measures are especially needed. The total cost of the services of the 16 sanitary officers in Virginia in the fiscal year 1924 was $31,723.90.

As evidence of the interest in sanitation aroused in the communities by the activities of the sanitary officers, is an investment conservatively estimated by the officer having immediate supervision of the work at $168,488.64, made by property owners during the fiscal year 1924 for tangible sanitary improvements, including installation of sanitary privies and septic tanks, improved construction to protect wells and springs from dangerous pollution, drainage for mosquito control, etc. The local popularity of the services of the sanitary officers is indicated by the votes of the members of the county boards of supervisors in the fiscal year 1924 on the question of appropriating for continuance of the work in their respective counties. Of an aggregate of 25 supervisors in five counties in which the work has been conducted more than four years, 23 voted for, 1 did not vote, and only 1 voted against the appropriation. Of an aggregate of 18 supervisors in four counties in which the work has been conducted for more than

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[6] Reprint No. 699, from Public Health Reports of Oct. 7, 1921, pp. 11, 12; Reprint No. 788, from Public Health Reports of Sept. 29, 1922, p. 14; and Reprint No. 887, from Public Health Reports of Dec. 14, 1923, p. 16.

[7] Caroline, Carroll, Charlotte, Chesterfield, Grayson, Greene, Greensville, Henry, Madison, Mathews, Prince Edward, Pulaski, Roanoke, Smyth, Spotsylvania, and Stafford.

[8] Reprint No. 615, from Public Health Reports of Oct. 1, 1920, pp. 10, 12; Reprint No. 699, from Public Health Reports of Oct. 7, 1921, pp. 12, 14; Reprint No. 788, from Public Health Reports of Sept. 29, 1922, pp. 14–17; and Reprint No. 887, from Public Health Reports of Dec. 14, 1923, pp. 16–18.

two but less than three years, 16 voted for and 2 against the appropriation.

A detailed account of the activities and the results in any of the projects would indicate the high value of this low-cost plan of work. The extent of the activities and the results in the different counties vary in almost direct proportion to the duration of the project.

The following summary report, prepared by Scientific Assistant George S. Bote, on the work in one of the first counties to secure the services of a sanitary officer and where the work has been in progress since June, 1919, is illustrative:

SUMMARY REPORT ON SERVICES OF SANITARY OFFICER IN CHESTERFIELD COUNTY, VA.

Only a few of the outstanding features will be mentioned in this summary. Reports have been sent to the chairman of the board of supervisors each month showing in detail the activities of the sanitary officer. The cost of the services of the sanitary officer has been about $2,500 a year. Of this amount, the county board of supervisors furnishes one-half, the State board of health one-fourth, and the United States Public Health Service one-fourth.

HOMES VISITED.

The sanitary officer has visited 3,566 homes in all parts of the county. During these visits he has interviewed some member of the family of the occupant and explained the health protection to be gained by having a sanitary privy, a safe water supply, and screens on the doors and windows. He has made 2,820 return trips for various purposes, many of which were to assist with the actual construction work. Appropriate bulletins and literature bearing on health matters were distributed at the time of these visits.

IMPROVEMENTS MADE.

To date (June 30, 1924) 1,671 homes have been provided with a sanitary system of excreta disposal, ranging from inside fixtures, running water, and septic tank, to the pit-type closet. One hundred and eighty places that had no privy of any kind before the work started have been sanitated. Fifty-one new wells have been put down and 58 old wells have been protected against pollution. Hundreds of homes have been screened and greater care is being manifested in the exclusion of flies from food in the dining rooms.

EXAMINATION FOR WORMS.

On making his rounds, the sanitary officer found evidence that the children of Bethany Home were infested with worms. He arranged with the superintendent to secure feces specimens and had them examined at the State board of health laboratory. It was found that of the 53 specimens, 58.5 per cent were infested as follows:

4 children had roundworm and hookworm;
2 children had hookworm;
12 children had roundworm;
13 children had whipworm; and
22 children were negative.

Treatments for those infested were furnished by the State board of health and were administered by Doctor Shelton, the Home physician. The sanitary officer also assisted in building a septic privy at the Home in place of the old open toilet in use. Since then running water and inside fixtures connecting with a septic tank have been installed. Feces specimens from 252 children in various parts of the county have been collected and examined, and treatment was supplied free of cost where needed. The rate of infestation was much lower in the latter group.

SMALLPOX VACCINATIONS.

Through arrangements made by the sanitary officer, 802 school children living in remote sections of the county have been vaccinated against smallpox.

MAD DOGS.

Near Drewerys Bluff a dog went mad and bit four people, nine dogs, and two pigs before it was killed. The sanitary officer followed the trail of the mad dog, located the dogs bitten, and had them treated or killed before rabies had time to develop. In Colonial Heights the sanitary officer killed three rabid dogs and one rabid cat. All of the 75 dogs which had been bitten by these rabid animals were killed, or tied up until the incubation period had expired, or were given antirabic treatment. In all cases the sanitary officer wired for the antirabic treatment for the people and this was given by the local physicians. As the board of supervisors is liable up to $200 for treatment of persons bitten by mad dogs, it is quite evident that the prompt action of the sanitary officer in suppressing a threatened outbreak of rabies resulted in a considerable saving—probably more on this one item alone than he cost the county.

EDUCATIONAL.

The sanitary officer secured the State board of health motion-picture outfit for use in Chesterfield County. Accordingly, he arranged for and held 24 shows in all sections of the county. The pictures dealt with health subjects and were seen by 4,631 persons, who went away with a better understanding of the cause and prevention of disease. These exhibitions resulted in many material changes being made at the homes.

Two hundred and thirty-seven health talks have been given to groups gathered in schools, churches, and at picnics. In March, 1924, the sanitary officer gave a concise, well-outlined course on hygiene and sanitation to the older pupils in 10 schools in the county. Seven hundred pupils received this instruction, and the examination papers show that the pupils have the right conception as to the cause and prevention of our most common diseases.

QUARANTINE.

Upon report from the attending physicians, 31 homes have been quarantined by the sanitary officer to prevent the spread of contagious diseases. He was given this authority about 12 months ago, and this has saved the usual quarantine fee paid the county health officer. Only diseases reported by the doctors are quarantined.

MOSQUITO CONTROL.

Several bad mosquito-breeding areas have been drained by the digging of 4,960 feet of drainage ditches. In other areas, where drainage would have been expensive, *Gambusia* top minnows have been used to control mosquito breeding. These small fish, which eat the larvae and prevent the wiggletail from developing into the mosquito, furnish an economical, and, in many instances, effective method of mosquito control in this county.

CLEAN-UP CAMPAIGNS.

Clean-up campaigns have been held in Colonial Heights, Ettrick, and Chester. These campaigns were conducted through the civic leagues of these places. At Ettrick 138 loads of trash and filth were hauled away, and approximately 90 per cent of the toilets were sanitary in the village as a result. At Colonial Heights this is an annual affair and is demanded by the citizens.

SCHOOL SANITATION.

All schools in the county were equipped with sanitary toilets before the end of the second year of the work. Chesterfield was the first county in Virginia to achieve this distinction. Since 1921 these facilities have been gone over each year and have been maintained in good sanitary condition. This work was done under the supervision of the sanitary officer, and cost about $3,000; without his services it would have cost over $5,000. Comparison of contract figures and the actual cost bear out this statement of saving.

TYPHOID VACCINATIONS.

Through the efforts of the sanitary officer, typhoid vaccination clinics were held at Bon Air, Midlothian, and Mayotown on account of the prevalence of typhoid fever in sections near these places. These clinics were free, and all the people in the community were urged to avail themselves of this protection. Special effort was made to get those in whose homes typhoid had occurred in recent years to take the treatment. Three hundred and eleven completed the three treatments and this has been adjudged a big factor in reducing the cases of typhoid in these particular areas.

RESULTS.

A comparison of the records for the five-year period before the sanitation program was inaugurated, with the five-year period during which the work has been in progress, shows remarkable results. These records are compiled from reports made to the State board of health by the physicians practicing in Chesterfield County.

Five-year period.	Typhoid fever.		Deaths from diarrhea and dysentery, under 2 years.	Deaths from tuberculosis of lungs.	Total deaths from all causes
	Deaths.	Cases.			
Before sanitary officer began—1914–1918	18	115	83	190	1,510
After sanitary officer began—1919–1923	8	30	43	117	1,155
Difference	10	85	40	73	355
Per cent reduction	55.6	74.0	48.2	38.4	23.5

A striking result of this work is that 40 fewer deaths occurred in infants under 2 years of age from diarrhea and dysentery, being 83 for one five-year period as against 43 for the time the health work has been going on.

There is also a definite saving of 10 lives from typhoid fever, and 85 people have been spared the expense, suffering, and mental anguish resultant from an attack of this disease.

Taking the deaths from all causes for the same five-year periods, we find that 355 fewer people, or an average of 71 per year, died during the five-year period after the inauguration of the sanitation program. The total cost to the county to conserve these 71 people each year was slightly more than $21 per life saved.

Three-County Project in Georgia.

Among the 153 counties in the State of Georgia, some are small in area and population and have not the economic resources to bear readily the expense for a complete health department, including a whole-time health officer with assistants for each county. How to furnish such small political units with economical and effective whole-time health service has been a difficult and an important problem. Surg. C. E. Waller, who is detailed to cooperate with the State board of health in the development and supervision of county health work in Georgia, has undertaken a plan which promises to demonstrate a practical solution of the problem by developing what is designated as a "three-county" project. It was agreed that $12,000 would be needed for the support of such project for the first period of 12 months and that of this amount the State Board of Health would furnish $3,000, the United States Public Health Service $3,000, and the three counties together would be required to furnish $6,000. Although the commissioners of a number of the counties expressed a desire for their respective counties to be included in the group, considerable effort was required to find three counties adjacent to each other whose commissioners desired the service and were willing to make the necessary appropriation to obtain it. Decatur, Seminole, and Miller Counties were finally selected for the group, and the work was begun on June 1, 1924. One whole-time health officer, who is a physician with training in health work, was duly appointed by the county authorities and serves as health officer of each of the three counties. In each county an assistant health officer is on duty who is a layman with practical training in sanitary work. Later on, one or more health nurses may be added to the working force in each county in the group. There appears good reason to expect this plan to prove satisfactory.

General Progress in Rural Health Work.

Progress in the development of whole-time rural (county) health service in the United States was continued in the fiscal year 1924. According to data[9] collected by the Rural Sanitation Office from the State health departments, the number of counties, or equivalent divisions, provided with local health service, reaching all rural sections thereof, under the direction of whole-time county or district health officers, was 250 at the beginning of the calendar year 1924, as against 230 at the beginning of the calendar year 1923, 202 at the beginning of the calendar year 1922, 161 at the beginning of the calendar year 1921, and 109 at the beginning of the calendar year 1920. The gain of 141 within this four-year period, though not as

[9] Reprint No. 921, from Public Health Reports of May 16, 1924.

large as it might have been had means been provided for a due and reasonably adequate degree of cooperation from the Federal and State official health agencies, is somewhat encouraging.

The idea of the county unit in the administration of whole-time health service is comparatively new. The first whole-time county health department approaching adequacy, under the direction of a whole-time county health officer, in the United States was established in Yakima County, Wash., in 1911.[10] At the annual conference of State health officers with the United States Public Health Service in June, 1924, almost all of the State health officers, in making their reports, indicated that the chief need for satisfactory health service in their respective States and one of the main objectives of their respective departments is the development of whole-time county health units. An apparent consensus of opinion at this conference was that the way in which the United States Public Health Service could be of greatest assistance in activities for the prevention of disease and the promotion of national health would be through adequate cooperation with the State health departments in the development and maintenance of whole-time county health service. Thus the plan of cooperative rural health work appears now to be well established in the minds of our public health administrators and to be well past the experimental stage. The provision of means to enable the Public Health Service to expand to a reasonable degree its program of cooperation in rural health work would greatly enhance the progress in whole-time rural health service. Besides the sanitary and economic benefits to the communities (mainly farming) resulting from such service, the cooperative plan to develop and maintain whole-time county health departments furnishes a most effective and least costly means of preventing the spread of human infections between the States.

Results.

The cooperative projects in the fiscal year ended June 30, 1924, yielded results exceeding in value many fold the cost of the work. Among the activities and results presented in the tabular statement

[10] The claim is made by some that to Jefferson County, Ky., belongs the credit of having had the first whole-time county health officer; but this claim appears to be based entirely on a statement in a report dated Nov. 30, 1909, from the Jefferson County health officer to the Kentucky State Board of Health to the effect that in the period Nov. 30, 1908 to Nov. 30, 1909, "the multidutinous duties have taken all of the time of the health officer." According to all the evidence available, this health officer was not engaged under contract to devote all of his working time to his public office, and therefore he was not technically a whole-time health officer. In a strong argument and appeal for the appointment of whole-time county health officers, on pages 19 and 20 of the Report of the State Board of Health of Kentucky for the Biennium 1908 to 1909, and on page 16 of the Biennial Report of the Kentucky State Board of Health, 1910 to 1911, no reference is made to the existence of whole-time health officer service in Jefferson County.

The North Carolina State Board of Health reports that a whole-time county health officer began duty in Guilford County on July 1, 1911, which was the date upon which the whole-time county health department of Yakima County, Wash., began work as such. The health officer of Guilford County had no assistants, and therefore it can not be properly designated as a whole-time county health department.

(pp. 2610 to 2621), to which especial consideration may be given, are the following:

1. Public lectures presenting the principles and details of sanitation to over 276,000 persons.

2. Over 155,500 sanitary inspections of premises, with explanation of findings to occupants or owners of the properties.

3. Physical examination of over 192,500 school children, of whom over 109,600 were found to have incapacitating physical defects, with notification of parents or guardians of defects found.

4. Thirty-seven thousand three hundred and sixty-four recorded treatments effecting correction of incapacitating physical defects among school children, brought about by written notification to parents or guardians, follow-up visits to homes of the children, making available proper clinical facilities, and other activities of the county or district health departments.

5. Treatments to correct iodine deficiency administered to 9,514 persons in endemic goiter districts.

6. Forty-seven thousand two hundred and two visits to homes of cases of communicable disease to advise and show the afflicted households how to prevent spread of the infections.

7. Five thousand nine hundred and eight visits by health nurses to prenatal cases to advise with and assist expectant mothers in carrying out hygienic and physiological measures making for healthy mothers and healthy babies.

8. Twenty-one thousand two hundred and thirty-one infants and children of preschool age examined and over 30,000 home visits by health nurses or health officers to demonstrate hygienic measures for the promotion of the health and the protection of the lives of infants.

9. Thirty-one thousand eight hundred and thirty-six persons inoculated for protection against typhoid fever.

10. Twenty-six thousand eight hundred and three persons vaccinated against smallpox.

11. Twelve thousand nine hundred and thirty-three children inoculated with toxin-antitoxin mixture for immunization against diphtheria.

12. Twenty-one thousand one hundred and seventy-eight cows tuberculin tested, with elimination of reactors from herds, to prevent communication of bovine tuberculosis to persons through the medium of milk.

13. One thousand three hundred and twenty persons treated effectively for relief from hookworm disease and for the prevention of the spread of the infection.

14. Marked reduction in the spread of malaria in hundreds of localities, with an aggregate population of several hundred thousand.

15. Thirty thousand two hundred and twenty-three treatments to rid persons of venereal disease infection and prevent the spread of the infection.

16. Special examination of 3,703 persons for tuberculosis, of whom 1,185 were found with an active tubercular process, and were advised to place themselves in the care of their private physicians and to carry out hygienic measures. Two hundred and eighty-one of the positive cases were sent to institutions maintained especially for the treatment of tuberculosis.

17. Twenty thousand one hundred and three cases of dangerous communicable diseases quarantined to prevent the spread of infection in the local community, the State, and throughout the country.

18. The installation of 9,709 sanitary privies and 1,011 septic tanks at dwellings where previously there had been either grossly insanitary privies or no toilets of any sort.

19. Seven thousand three hundred and twenty-six privies repaired so as again to be of sanitary type.

20. Four thousand eight hundred and sixty-nine homes connected for the first time with sanitary sewers.

21. Four thousand nine hundred and fifty-two homes provided with safe water supplies in place of contaminated water supplies.

22. Radical improvement of 432 public milk supplies, the milk from which was being distributed to a considerable extent through the channels of interstate commerce, to prevent the spread, through milk and milk products, of such infections as typhoid fever, scarlet fever, diphtheria, tuberculosis, septic sore throat, and infant diarrhea.

23. Twenty-one thousand one hundred and three citizens over 40 years of age examined and advised about measures to conserve their vital capital.

Such results indicate that the plan of the work is both comprehensive and effective. They mean prevention of premature human death, prevention of human illness, promotion of human health, conservation of economic resources. They stand in importance to our national welfare second to no other results obtainable from equivalent investment of public funds.

OUTBREAK OF SCARLET FEVER CAUSED BY MILK-BORNE INFECTION.

By ARTHUR JORDAN, Field Agent, United States Public Health Service, Health Officer Lewis and Clark County, Montana.

On April 29, 1924, four cases of scarlet fever were reported to the health office of Lewis and Clark County, Mont. The cases were in persons residing in widely separated parts of the city of Helena. Three were in boys, aged 6, 6, and 8, respectively, and one case was

in a girl aged 18 years. Each of the boys attended a different public school. The girl did not attend school. In view of the general circumstances it seemed improbable that the infection in these cases had been spread through personal contact.

On investigation of the cases it was ascertained that all four were in households obtaining milk from the same dairyman. This milk supply was the only common factor found which could be involved in the spread of scarlet fever infection. Three samples of the suspected milk supply were obtained, of which one was sent to the laboratory of the State Board of Health, and two were sent to the laboratory of the State Livestock Sanitary Board, for bacteriological examination. The reports were that each of the three samples contained a large number of a *Streptococcus hemolyticus*. Organisms apparently identical with this organism were found later in cultures made from the throats of a number of the cases.

Upon visiting the dairy and examining the personnel then in contact with the milk, no case of scarlet fever or sore throat was found; but information was obtained from a recent employee that one of the milkers had had a moderately severe sore throat beginning about a week or 10 days before the outbreak and persisting for several days.

Distribution of the implicated milk supply was stopped at once. Instructions were given for sterilization of all equipment and thorough cleanliness in the handling of the milk. In samples taken after these measures were put into operation no streptococci were found on bacteriological examination.

The daily distribution of milk from this dairy had been about 50 gallons (including milk furnished Intermountain College). The supply was not pasteurized. The milk was delivered to about 48 households in which it was consumed, it is estimated, by about 160 persons.

On the morning of April 30, one of the practicing physicians of Helena inquired by telephone at the health office whether there were any cases of septic sore throat in the city. He was informed that none had been reported, but that four cases of scarlet fever had been reported within the previous 24 hours. About two hours later he reported 16 cases of scarlet fever among students in the Mills Hall Dormitory of the Intermountain College in Helena.

The health officer immediately visited the college and ascertained (1) that the cases among the college students had developed within 24 hours after the four cases previously reported in Helena, and (2) that the milk supply of the college was obtained from the same source (dairy X) as that which had been used by the families in which the four cases first reported had occurred.

About 200 students attend Intermountain College. Many of them do not take their meals at the college and none of these, except

three who boarded at homes obtaining milk from dairy X, developed scarlet fever. Among 80 students taking meals at the college and more or less exposed to infection by means of the milk supplied from dairy X, 17 cases developed. These students did not all drink milk. In addition to the 17 cases in the college, but including the 4 cases reported in Helena on April 29, 21 cases definitely attributed to infection in the milk supplied from dairy X were reported in the city.

The dates of onset of the cases attributed to the milk-borne infection are given in the table below.

Dates of onset of the cases attributed to the milk-borne infection.

Date of onset.	Number of cases.		
	College.	City.	Total.
Apr. 29, 1924		4	4
Apr. 30, 1924	16	12	28
May 1, 1924		6	6
Total	16	22	38

Besides the measures taken at once to prevent the further spread of the infection through the milk supplied by dairy X, measures were taken as promptly as possible to prevent spread of infection through personal contact. The cooperation of the practicing physicians in reporting cases promptly and assisting in the quarantine measures was exceedingly helpful and is here acknowledged with deep gratification.

Through the cooperation of the college authorities and the attending physician, precautionary measures were carried out at Intermountain College with remarkable success. Only one secondary case developed there, and that case was in the nurse on duty in the isolation ward attending the 17 original cases among the students.

Outside the college 16 cases developed which were attributed to personal-contact infection. The table below gives the dates of onset of the cases attributed to personal contact:

Dates of onset of the cases attributed to personal contact.

Date of onset.	Number of cases.		
	College.	City.	Total.
May 3, 1924	1	1	2
May 4, 1924	0	5	5
May 5, 1924	0	4	4
May 6, 1924	0	4	4
May 7, 1924	0	1	1
May 8, 1924	0	1	1
Total	1	16	17

No case of scarlet fever had been reported in Helena during the 60-day period prior to the beginning of the outbreak on April 29. The last previous case had been reported January 19, 1924.

That only 17 contact cases occurred from exposure to the potential foci of infection in the 38 cases caused by the milk-borne infection is exceedingly gratifying, and particularly so in view of the fact that of the total of 55 cases occurring in the outbreak 14 were without skin rash, and therefore could not be diagnosed readily. Six typical cases with skin eruption developed among persons intimately associated with cases in which the skin rash did not appear and which were diagnosed as septic sore throat.

In the city, more contact cases occurred among adults than among children. This is attributed to the fact that, through the hearty cooperation of the teachers in the public and parochial schools of the city, each morning any child who showed any signs of illness was isolated at the school building, the health officer was called at once, an immediate examination was made, and if any suspicious symptoms were present the child was sent home and isolated until it was definitely determined that the case was not scarlet fever. A list of all pupils absent each morning was furnished the health officer. These pupils were visited, and if they were found suspicious for scarlet fever the other children were kept at home until the period of incubation (one week, to be safe) had elapsed. All suspected cases were isolated, as far as was practicable, from other members of the family. This action, with the prompt reporting of diagnosed or suspected cases by the practicing physicians, had a very material effect in limiting the number of contact cases. The investigation of pupils absent from school has a tendency to induce parents to report promptly mild cases which they would not ordinarily report, for they know that within a short time the health officer will call at the home, and with very few exceptions they dislike to have the public know that they have had a contagious disease in the home and did not report it. It also has the effect of having them call their physician earlier than they would ordinarily. The health department invariably insists that householders call their family physician to make the diagnosis of contagious disease, but suspected cases are promptly quarantined and their residences are placarded until a definite diagnosis is made.

None of the 55 cases occurring in the outbreak terminated fatally. Four had acute nephritis and two had rheumatism as complications. No middle-ear complication was reported.

In making the investigation promptly to determine the source of the infection and in carrying out immediately measures for the control of this outbreak, with the cooperation of the college and public

school officials, the practicing physicians, and the householders generally, the advantages of a whole-time local health service over a part-time health service in such a situation were manifest.

In Lewis and Clark County there is a whole-time county-city health department, under the direction of a whole-time county health officer. Through cooperative arrangements between the United States Public Health Service and the officials of Lewis and Clark County and the city of Helena, this department was established in December, 1921, and has been maintained since that time. The members of the department are engaged to devote all of their working time to the health work. At the beginning of the outbreak some worked over 20 hours a day. A part-time health service could not have been expected to do the amount of work which was necessary to make the control measures promptly and vigorously effective. A part-time health officer engaged in the practice of medicine would probably have had his private practice so increased in the presence of such an outbreak that he would have been unable to devote even the usual amount of his time to the duties of his public office. If the measures to control this outbreak had not been prompt and vigorous, the infection certainly would have spread much more extensively, locally as well as to other parts of the State, and possibly to other States. In the control of this outbreak it is shown that State and Federal health agencies may perform a most important function by cooperating in the establishment and maintenance of reasonably adequate, whole-time local health service.

During the past two years the woman's department of the Commercial Club of Helena has financed a milk fund for underweight children in the public and parochial schools of the city. Last fall the health department furnished them a list of dairies from which they might purchase milk. They were instructed not to purchase milk from any dairy that was not on the list. There were four dairies omitted from the list, because they were considered unsafe in cleanliness and technique, and among them was the dairy (dairy X) responsible for the outbreak of scarlet fever here reported. It is alarming to think what might have been the consequences if the milk from dairy X had been delivered to those 300 underweight school children in the city of Helena.

The occurrence of this outbreak of scarlet fever caused by milk-borne infection adds another item to the long list indicating the importance (*a*) of cleanly methods in the handling of all milk for human consumption, and (*b*) of the pasteurization of public milk supplies.

CURRENT COURT DECISIONS PERTAINING TO PUBLIC HEALTH.

Use as cemetery of land near water supply restrained.—The New York Supreme Court has restrained the use of certain land for cemetery purposes and has held that a town board of health was justified in adopting a resolution declaring the proposed use of the land for such purposes to be a public nuisance. The land in question was near several drinking-water wells, and, because of the nature of the soil, the burial of dead human bodies on the tract would have created a nuisance. (Town of Cheektowaga *v.* Sts. Peter and Paul Greek Russian Orthodox Church, of Buffalo, N. Y., 205 N. Y. Supp. 334.)

City liable for negligent installation and management of incinerator.—The Supreme Court of South Carolina has decided that a city must respond in damages for the negligent installation and management of an incinerator. The court held that the action was maintainable against the city, even though there was no statute authorizing it, and also held that the plaintiff had a cause of action based upon negligent operation, even though he may not have suffered damage different in kind as well as in degree from what the general public has suffered. (Kneece *v.* City of Columbia, 123 S. E. 100.)

City liable for sewage pollution of stream.—Even though a city has created and maintains a recognized sewage disposal plant or was not negligent in its adoption of a proper plant, the Supreme Court of Wisconsin has held that it must respond in damages where it has created a nuisance by the discharge of sewage into a stream, and that it is subject to injunctive relief having as its aim the abatement of the nuisance. (Mitchell Realty Co. et al. *v.* City of West Allis, 199 N. W. 390.)

Discharge of sewage effluent by city.—The California District Court of Appeal, Third District, has held that a permit issued by the State board of health authorizing a city to discharge sewage effluent into a river does not authorize the city to create or continue a nuisance or in anywise limit the power of the court to abate the same if found to exist. (People *v.* City of Reedley et al., 226 Pac. 408.)

Physical examination of venereally infected person.—The Supreme Court of Mississippi, Division B, has held that a statute which authorized the physical examination of any person suspected of being afflicted with an infectious venereal disease was not violated by a refusal to appear for examination in response to a summons issued by an officer of the board of health. The constitutionality of the act in question (chapter 194 of the 1918 session laws) was attacked, but was not passed upon by the court. (City of Jackson *v.* Mitchell, 100 South. 513.)

DEATH RATES IN A GROUP OF INSURED PERSONS.

COMPARISON OF PRINCIPAL CAUSES OF DEATH, JULY AND AUGUST, 1924, AND AUGUST AND YEAR, 1923.

The accompanying table is taken from the Statistical Bulletin for September, 1924, published by the Metropolitan Life Insurance Co., and presents the mortality experience of the industrial insurance department of the company for August, 1924, as compared with that for July, 1924, and for August and year, 1923. The rates are based on a strength of approximately 15,000,000 insured persons.

Health conditions in this group of persons, as reflected in the mortality rates, continued good during August, the gross death rate for the month being 7.3 per 1,000—the lowest rate for August on the records of the company. This rate shows a decline of 13 per cent as compared with rates for August, 1923, and for July, 1924, both of which were 8.4 per 1,000.

This favorable health condition for August, 1924, as compared with the corresponding month of last year, applies to all of the principal causes of death and diseases of public health importance with the one exception of scarlet fever. The slight increase in mortality from scarlet fever has no significance, however, in view of the very low death rates for this disease for the month in both years.

The continued low death rates for typhoid fever and tuberculosis apparently justify the prediction that these diseases will establish record low rates for the year.

The rates for the "degenerative diseases" continued to show declines as compared with the preceding months, and are also much lower than the rates for the same month of 1923.

Death rates (annual basis) for principal causes per 100,000 lives exposed, July and August, 1924, and August and year, 1923.

[Industrial Department, Metropolitan Life Insurance Co.]

Cause of death.	Death rate per 100,000 lives exposed.[1]			
	Aug. 1924.	July, 1924.	Aug., 1923.[2]	Year 1923.[2]
Total, all causes	730.2	839.2	842.0	928.2
Typhoid fever	6.0	4.2	8.1	5.1
Measles	1.7	3.7	6.2	9.5
Scarlet fever	1.8	3.4	1.6	4.4
Whooping cough	6.1	8.3	9.7	7.4
Diphtheria	5.7	7.6	9.3	15.5
Influenza	4.0	5.0	4.1	30.3
Tuberculosis (all forms)	90.9	100.1	105.6	110.1
Tuberculosis of respiratory system	78.9	88.1	93.5	99.7
Cancer	61.3	70.9	67.4	71.8
Diabetes mellitus	11.4	12.3	12.1	16.0
Cerebral hemorrhage	46.9	53.0	47.3	61.2
Organic diseases of heart	95.3	109.4	103.7	127.3
Pneumonia (all forms)	32.3	46.6	35.6	83.9
Other respiratory diseases	7.6	11.6	8.6	13.9
Diarrhea and enteritis	49.8	35.1	69.1	28.2
Bright's disease (chronic nephritis)	49.2	60.1	57.6	68.8
Puerperal state	11.9	15.1	13.1	17.7
Suicides	5.0	5.8	5.7	7.3
Homicides	7.1	9.1	7.4	7.3
Other external causes (excluding suicides and homicides)	66.6	82.7	73.8	62.9
Traumatism by automobile	14.8	18.0	18.2	15.3
All other causes	169.7	195.4	195.8	179.4

[1] All figures include infants insured under 1 year of age.

[2] Provisional figures for 1923 given previously have been revised on the basis of final tabulations of data on the lives exposed to risk.

DEATHS DURING WEEK ENDED OCTOBER 4, 1924.

Summary of information received by telegraph from industrial insurance companies for week ended October 4, 1924, and corresponding week of 1923. (From the Weekly Health Index, October 7, 1924, issued by the Bureau of the Census, Department of Commerce.)

	Week ended October 4, 1924.	Corresponding week, 1923.
Policies in force	57, 129, 488	53, 593, 522
Number of death claims	9, 086	8, 906
Death claims per 1,000 policies in force, annual rate	8. 3	8. 7

Deaths from all causes in certain large cities of the United States during the week ended October 4, 1924, infant mortality, annual death rate, and comparison with corresponding week of 1923. (From the Weekly Health Index, October 7, 1924, issued by the Bureau of the Census, Department of Commerce.)

City.	Week ended Oct. 4, 1924.		Annual death rate per 1,000, corresponding week, 1923	Deaths under 1 year.		Infant mortality rate, week ended Oct. 4, 1924.[2]
	Total deaths.	Death rate.[1]		Week ended Oct. 4, 1924.	Corresponding week, 1923.	
Total (64 cities)	5, 606	11. 1	[3] 10. 5	749	[3] 772	
Akron	32			5	14	53
Albany [4]	35	15. 4	12. 4	2	3	46
Atlanta	54	12. 4	11. 2	3	9	
Baltimore [4]	267	13. 8	13. 1	28	24	113
Birmingham	65	16. 9	10. 6	15	10	
Bridgeport	30			5	6	80
Buffalo	143	13. 7	10. 3	18	13	76
Cambridge	22	10. 2	12. 6	1	3	17
Camden	37	15. 3	15. 5	6	10	98
Canton	17	8. 6	10. 5	4	4	87
Chicago [4]	545	9. 7	9. 8	69	96	64
Cincinnati	98	12. 5	13. 1	6	16	38
Cleveland	142	8. 1	7. 4	22	18	56
Columbus	58	11. 3	12. 6	7	10	66
Dallas	42	11. 7	9. 2	8	4	
Dayton	44	13. 6	8. 2	7	7	117
Denver	60			11	13	
Des Moines	28	10. 1	15. 5	0	7	
Detroit	245			42	48	78
Duluth	17	8. 2	5. 9	1	3	22
Erie	17			4	2	83
Fall River [4]	24	10. 3	7. 8	6	6	84
Flint	18			6	8	104
Fort Worth	23	8. 1	5. 1	6	4	
Grand Rapids	31	10. 9	6. 8	3	3	47
Houston	28			5	3	
Indianapolis	89	13. 2	9. 9	13	15	96
Jacksonville, Fla	20	10. 2	18. 2	3	2	
Jersey City	65	10. 9	7. 8	10	7	71
Kansas City, Kans	28	12. 4	13. 1	1	4	19
Kansas City, Mo	100	14. 5	9. 8	16	7	
Los Angeles	204			20	21	62
Louisville	86	17. 3	14. 2	15	9	140
Lowell	35	15. 8	14. 0	6	7	107
Lynn	25	12. 6	11. 2	2	3	51
Memphis	65	19. 7	20. 8	6	6	
Milwaukee	67	7. 1	10. 7	8	11	38
Minneapolis	59	7. 4	9. 4	6	5	32
Nashville [4]	40	16. 9	14. 9	3	6	
New Bedford	25	9. 8	12. 0	3	8	47
New Haven	52	15. 4	14. 5	4	6	53
New Orleans	116	14. 8	14. 6	13	12	
New York	1, 265	10. 4	9. 9	162	164	66
Bronx Borough	146	8. 7	6. 6	19	9	67
Brooklyn Borough	413	9. 8	9. 7	59	62	63
Manhattan Borough	513	11. 8	11. 6	61	78	62
Queens Borough	97	9. 1	8. 6	16	13	81
Richmond Borough	36	14. 4	9. 4	7	2	128

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1923. Cities left blank are not in the registration area for births.
[3] Data for 62 cities.
[4] Deaths for week ended Friday, October 3, 1924.

Deaths from all causes in certain large cities of the United States during the week ended October 4, 1924, infant mortality, annual death rate, and comparison with corresponding week of 1923. (From the Weekly Health Index, October 7, 1924, issued by the Bureau of the Census, Department of Commerce.)—Continued.

City.	Week ended Oct. 4, 1924.		Annual death rate per 1,000, corresponding week, 1923.	Deaths under 1 year.		Infant mortality rate, week ended Oct. 4, 1924.
	Total deaths.	Death rate.		Week ended Oct. 4, 1924.	Corresponding week, 1923.	
Newark, N. J	73	8.5	9.9	20	15	94
Norfolk	30	9.5	9.8	6	5	107
Oakland	49	10.3	12.6	6	13	75
Oklahoma City	28	14.0		8		
Omaha	25	6.3	11.5	6	3	64
Paterson	28	10.4	12.0	3	6	51
Philadelphia	424	11.3	10.2	54	53	69
Pittsburgh	166	13.8	12.4	34	25	115
Portland, Oreg	57	10.7	9.5	2	4	21
Providence	55	11.8	9.9	6	7	49
Richmond	51	14.5	12.7	7	10	85
Rochester	74	11.9		11		87
St. Louis	196	12.6	11.1	21	25	
St. Paul	27	5.8	8.2	5	5	43
San Antonio	47	12.8	11.9	11	6	
San Francisco	146	13.9	11.4	12	8	72
Schenectady	15	7.8	9.0	4	1	119
Seattle	71			7	6	68
Somerville	20	10.4	10.0	3	3	82
Spokane	29			2	1	44
Springfield, Mass	36	12.6	12.7	3	12	51
Syracuse	39	10.8	7.9	1	5	12
Tacoma	21	10.6	7.7	0	0	0
Toledo	52	9.8	10.6	4	5	38
Trenton	25	10.1	11.9	3	2	50
Utica	18	8.9	9.1	1	3	22
Washington, D. C	90	9.6	13.1	9	17	52
Waterbury	23			5	9	116
Wilmington, Del	20	8.7	7.5	3	3	67
Worcester	37	9.9	7.1	2	3	24
Yonkers	19	9.0	7.8	3	6	109
Youngstown	29	9.7	11.1	6	5	83

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CURRENT WEEKLY STATE REPORTS.

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers.

Reports for Week Ended October 11, 1924.

ALABAMA.

	Cases.
Cerebrospinal meningitis	1
Chicken pox	4
Dengue	2
Diphtheria	38
Dysentery	3
Influenza	16
Malaria	151
Measles	1
Mumps	16
Pellagra	9
Pneumonia	20
Scarlet fever	17
Smallpox	9
Tuberculosis	19
Typhoid fever	51
Whooping cough	12

ARIZONA.

Mumps	6
Scarlet fever	1
Smallpox	2
Typhoid fever	1
Whooping cough	4

ARKANSAS.

Chicken pox	3
Diphtheria	11
Hookworm disease	2
Influenza	26
Malaria	107
Measles	1
Mumps	3
Pellagra	5
Scarlet fever	4
Tuberculosis	6
Typhoid fever	24
Whooping cough	22

CALIFORNIA.

Cerebrospinal meningitis—Alameda	1
Diphtheria	169
Influenza	4
Lethargic encephalitis:	
Azusa	1
Ferndale	1
San Francisco	1

CALIFORNIA—continued.

	Cases.
Measles	20
Poliomyelitis:	
San Francisco	1
Pomona	1
Contra Costa County	1
Scarlet fever	96
Smallpox:	
Fresno	9
Los Angeles	9
Sacramento	9
Scattering	23
Typhoid fever	18
Typhus fever—Los Angeles	1

COLORADO.

(Exclusive of Denver.)

Cerebrospinal meningitis	1
Chicken pox	5
Diphtheria	10
Pneumonia	1
Scarlet fever	5
Tuberculosis	22
Typhoid fever	9

CONNECTICUT.

Chicken pox	14
Diphtheria	29
Dysentery (bacillary)	1
Lethargic encephalitis	1
Measles	9
Mumps	14
Pneumonia (lobar)	20
Poliomyelitis	10
Scarlet fever	42
Tetanus	3
Tuberculosis (all forms)	42
Typhoid fever	13
Whooping cough	46

DELAWARE.

Chicken pox	1
Diphtheria	1
Measles	1
Scarlet fever	2
Tuberculosis	1
Typhoid fever	2

FLORIDA.

	Cases.
Diphtheria	19
Malaria	22
Scarlet fever	2
Typhoid fever	10

GEORGIA.

Chicken pox	2
Diphtheria	83
Dysentery (amebic)	1
Hookworm disease	15
Influenza	1
Malaria	27
Measles	1
Mumps	3
Pneumonia	3
Scarlet fever	4
Smallpox	1
Tuberculosis (all forms)	12
Typhoid fever	18
Typhus fever	1

ILLINOIS.

Cerebrospinal meningitis:	
Cook County	3
Du Page County	1
Sangamon County	1
Tazewell County	1
Diphtheria:	
Cook County	68
Scattering	49
Influenza	5
Measles	38
Pneumonia	183
Poliomyelitis:	
Bureau County	1
Carroll County	1
Cass County	1
Clay County	1
Cook County	11
De Kalb County	1
Henry County	1
Jo Daviess County	1
Lee County	1
McLean County	1
Will County	1
Scarlet fever:	
Cook County	95
Kane County	9
La Salle County	10
Scattering	73
Smallpox:	
Carroll County	30
Scattering	12
Tuberculosis	365
Typhoid fever	51
Whooping cough	116

INDIANA.

Chicken pox	27
Diphtheria	89
Influenza	14
Measles	15
Mumps	4
Pneumonia	5
Poliomyelitis	6

INDIANA—continued.

	Cases.
Scarlet fever	73
Smallpox	11
Trachoma	2
Tuberculosis	44
Typhoid fever	17
Whooping cough	18

IOWA.

Diphtheria	11
Poliomyelitis	3
Scarlet fever	15
Smallpox	19
Typhoid fever	6

KANSAS.

Cerebrospinal meningitis	1
Chicken pox	37
Diphtheria	36
German measles	1
Influenza	1
Measles	4
Mumps	35
Pneumonia	12
Poliomyelitis	3
Scarlet fever	52
Tuberculosis	40
Typhoid fever	14
Whooping cough	17

LOUISIANA.

Diphtheria	18
Hookworm disease	5
Malaria	9
Measles	4
Pneumonia	20
Poliomyelitis	1
Scarlet fever	8
Smallpox	4
Tuberculosis	30
Typhoid fever	17

MAINE.

Cerebrospinal meningitis	1
Chicken pox	16
Diphtheria	6
Lethargic encephalitis	1
Measles	1
Mumps	7
Pneumonia	3
Poliomyelitis	9
Scarlet fever	8
Septic sore throat	2
Smallpox	1
Tuberculosis	14
Typhoid fever	14
Whooping cough	1

MARYLAND.[1]

Chicken pox	25
Diphtheria	40
Dysentery	5
Influenza	8
Malaria	3
Measles	9
Mumps	12
Paratyphoid fever	4

[1] Week ended Friday.

MARYLAND—continued.

	Cases.
Pneumonia (all forms)	23
Poliomyelitis	11
Scarlet fever	30
Tuberculosis	62
Typhoid fever	29
Whooping cough	60

MASSACHUSETTS.

Anthrax	1
Cerebrospinal meningitis	3
Chicken pox	48
Conjunctivitis (suppurative)	21
Diphtheria	115
Dysentery	3
German measles	1
Hookworm disease	1
Influenza	7
Lethargic encephalitis	3
Malaria	2
Measles	50
Mumps	32
Ophthalmia neonatorum	22
Pellagra	1
Pneumonia (lobar)	60
Poliomyelitis	16
Scarlet fever	139
Septic sore throat	4
Tetanus	1
Trichinosis	1
Tuberculosis (all forms)	138
Typhoid fever	15
Whooping cough	32

MICHIGAN.

Diphtheria	104
Measles	82
Pneumonia	28
Scarlet fever	132
Smallpox	7
Tuberculosis	46
Typhoid fever	21
Whooping cough	66

MINNESOTA.

Chicken pox	53
Diphtheria	102
Measles	11
Poliomyelitis	7
Scarlet fever	122
Smallpox	40
Tuberculosis	58
Typhoid fever	6
Whooping cough	3

MISSISSIPPI.

Diphtheria	34
Scarlet fever	7
Smallpox	1
Typhoid fever	20

MISSOURI.

Cerebrospinal meningitis	4
Chicken pox	41
Diphtheria	154
Measles	16
Mumps	7
Ophthalmia neonatorum	4

MISSOURI—continued.

	Cases.
Pneumonia	1
Poliomyelitis	8
Scarlet fever	437
Septic sore throat	2
Trachoma	23
Tetanus	1
Tuberculosis	131
Typhoid fever	37
Whooping cough	17

MONTANA.

Diphtheria	9
Poliomyelitis:	
Arlee	1
Deer Lodge	1
East Helena	1
Helena	1
Helena R. F. D	1
Livingston	1
Missoula	2
Ronan	1
St. Ignatius	4
Townsend R. F. D	2
Victor	1
Scattering	2
Scarlet fever	23
Smallpox	8
Typhoid fever	6

NEW JERSEY.

Cerebrospinal meningitis	1
Chicken pox	106
Diphtheria	68
Influenza	1
Malaria	1
Measles	33
Pneumonia	51
Poliomyelitis	4
Scarlet fever	70
Smallpox	1
Trachoma	3
Typhoid fever	26
Whooping cough	141

NEW MEXICO.

Chicken pox	5
Diphtheria	6
Influenza	2
Measles	47
Mumps	2
Paratyphoid fever	1
Pellagra	1
Pneumonia	5
Poliomyelitis	1
Scarlet fever	2
Tuberculosis	22
Typhoid fever	49
Whooping cough	4

NEW YORK.

(Exclusive of New York City.)

Cerebrospinal meningitis	3
Diphtheria	151
Influenza	19
Lethargic encephalitis	4
Measles	81

NEW YORK—continued.

	Cases.
Pneumonia	138
Poliomyelitis	34
Scarlet fever	121
Smallpox	4
Typhoid fever	58
Whooping cough	191

NORTH CAROLINA.

Cerebrospinal meningitis	1
Chicken pox	25
Diphtheria	244
German measles	1
Measles	21
Poliomyelitis	2
Scarlet fever	51
Septic sore throat	3
Smallpox	5
Typhoid fever	37
Whooping cough	85

OKLAHOMA.

(Exclusive of Oklahoma City and Tulsa.)

Diphtheria	8
Smallpox	3
Typhoid fever	15

OREGON.

Chicken pox	21
Diphtheria:	
Portland	16
Scattering	21
Influenza	[1] 2
Lethargic encephalitis	1
Malaria	1
Measles	1
Pneumonia	[1] 1
Poliomyelitis	13
Scarlet fever	20
Smallpox	5
Tuberculosis	17
Typhoid fever	3
Whooping cough	2

SOUTH DAKOTA.

Chicken pox	4
Diphtheria	5
Measles	1
Pneumonia	1
Poliomyelitis	2
Scarlet fever	35
Smallpox	1
Tetanus	1
Typhoid fever	2
Whooping cough	8

TEXAS.

Chicken pox	17
Dengue	7
Diphtheria	36
Dysentery	6
Influenza	59
Measles	9
Mumps	14
Ophthalmia neonatorum	1
Paratyphoid fever	9

TEXAS—continued.

	Cases.
Pellagra	20
Pneumonia	6
Poliomyelitis	1
Scarlet fever	23
Smallpox	2
Trachoma	12
Tuberculosis	67
Typhoid fever	52
Typhus fever	3
Whooping cough	47

VERMONT.

Chicken pox	15
Diphtheria	5
Mumps	5
Poliomyelitis	1
Whooping cough	8

VIRGINIA.

Cerebrospinal meningitis:	
Giles County	2
Roanoke County	1
Poliomyelitis—Accomac County	1

WASHINGTON.

Chicken pox	53
Diphtheria	33
Measles	10
Mumps	16
Poliomyelitis:	
Bellingham	1
Seattle	17
Spokane	6
Tacoma	15
Yakima	1
Franklin County	1
Okanogan County	2
Skagit County	2
Stevens County	4
Yakima County	1
Scarlet fever	18
Smallpox	5
Tuberculosis	27
Typhoid fever	13
Whooping cough	21

WEST VIRGINIA.

Diphtheria	6
Scarlet fever	22
Typhoid fever	22

WISCONSIN.

Milwaukee:	
Chicken pox	21
Diphtheria	16
Measles	1
Mumps	10
Pneumonia	5
Scarlet fever	6
Tuberculosis	14
Typhoid fever	1
Whooping cough	10
Scattering:	
Cerebrospinal meningitis	2
Chicken pox	80

[1] Deaths.

WISCONSIN—continued.

Scattering—Continued.	Cases.
Diphtheria	52
German measles	3
Influenza	3
Measles	40
Mumps	6
Pneumonia	13
Poliomyelitis	3
Scarlet fever	100
Smallpox	18
Tuberculosis	29

WISCONSIN—continued.

Scattering—Continued.	Cases.
Typhoid fever	5
Whooping cough	101

WYOMING.

Chicken pox	1
Impetigo contagiosa	1
Mumps	4
Pneumonia	1
Scarlet fever	2
Typhoid fever	2
Whooping cough	4

Reports for Week Ended October 4, 1924.

ALABAMA.

	Cases.
Cerebrospinal meningitis	2
Chicken pox	3
Diphtheria	27
Dysentery	12
Influenza	10
Malaria	94
Measles	9
Mumps	28
Pellagra	2
Pneumonia	16
Scarlet fever	15
Smallpox	10
Tetanus	1
Typhoid fever	46
Whooping cough	12

CALIFORNIA.

Cerebrospinal meningitis:	
Long Beach	1
Los Angeles	1
Stockton	1
Diphtheria	185
Influenza	18
Leprosy:	
Los Angeles	1
San Francisco	1
Measles	17
Poliomyelitis:	
Los Angeles	1
Oakland	1
Pasadena	1
Scarlet fever	76
Smallpox:	
Los Angeles	22
Scattering	20
Typhoid fever:	
Lassen County	15
Scattering	26

DISTRICT OF COLUMBIA.

Chicken pox	1
Diphtheria	7
Lethargic encephalitis	2
Measles	1
Poliomyelitis	5
Scarlet fever	5
Tuberculosis	24
Whooping cough	4

INDIANA.

	Cases.
Chicken pox	19
Diphtheria	72
Influenza	54
Measles	7
Pneumonia	11
Poliomyelitis	4
Scarlet fever	75
Smallpox	27
Tuberculosis	28
Typhoid fever	43
Whooping cough	19

MINNESOTA.

Cerebrospinal meningitis	1
Chicken pox	26
Diphtheria	85
Influenza	5
Lethargic encephalitis	1
Measles	7
Pneumonia	1
Poliomyelitis	10
Scarlet fever	132
Smallpox	25
Tuberculosis	71
Typhoid fever	9
Whooping cough	8

MISSISSIPPI.

Diphtheria	22
Scarlet fever	9
Smallpox	19
Typhoid fever	15

MISSOURI.

(Exclusive of St. Louis.)

Chicken pox	12
Diphtheria	50
Influenza	1
Measles	1
Mumps	1
Poliomyelitis	1
Pneumonia	3
Scarlet fever	35
Trachoma	46
Tuberculosis	16
Typhoid fever	25
Whooping cough	7

NEBRASKA.

	Cases.
Chicken pox	10
Diphtheria	34
Mumps	2
Pneumonia	1
Scarlet fever	16
Smallpox	1
Tuberculosis	1
Typhoid fever	1
Whooping cough	1

NORTH DAKOTA.[1]

Cerebrospinal meningitis	3
Chicken pox	38
Diphtheria	13
Measles	23
Pneumonia	2
Poliomyelitis	9
Scarlet fever	67
Smallpox	10
Trachoma	11
Tuberculosis	4

[1] Report for 2 weeks ended Oct. 4, 1924.

NORTH DAKOTA—continued

	Cases.
Typhoid fever	2
Whooping cough	23

OKLAHOMA

(Exclusive of Oklahoma City and Tulsa.)

Cerebrospinal meningitis:	
Okmulgee County	1
Tillman County	1
Diphtheria	12
Influenza	3
Typhoid fever	45

WYOMING.

Chicken pox	4
Diphtheria	1
Measles	1
Mumps	11
Scarlet fever	2
Trachoma	8
Typhoid fever	4
Whooping cough	2

SUMMARY OF MONTHLY REPORTS FROM STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
August, 1924.										
California	8	521	21	3	146	3	9	156	211	94
South Dakota		22			14		6	53	5	37
September, 1924.										
Georgia		112	13	96	3	13		26	5	98
Massachusetts	17	318	7	1	143		88	367		81
Oklahoma	2	55	6	18	3	4	1	26	14	165

FOOT-AND-MOUTH DISEASE IN TEXAS.

Foot-and-mouth disease is reported to be prevalent in the vicinity of Houston, Tex., the first cases having been notified during the latter part of September. No outbreaks from new foci have occurred since that time and no human cases have been reported. State and Federal officials are in charge of control measures.

The Republic of Mexico has established a quarantine against vehicles, freight, and passengers from the infected district, and is requiring that Pullman coaches, freight cars, automobiles, and other vehicles be fumigated and that passengers and baggage from the infected zone be disinfected before being allowed to enter Mexico.

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES.

Diphtheria.—For the week ended September 27, 1924, 35 States reported 1,573 cases of diphtheria. For the week ended September 29, 1923, the same States reported 2,343 cases of this disease. One hundred and one cities, situated in all parts of the country, and having an aggregate population of more than 28,500,000, reported 771 cases of diphtheria for the week ended September 27, 1924. Last year, for the corresponding week, they reported 1,069 cases. The estimated expectancy for these cities was 1,031 cases of diphtheria. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Measles.—Thirty States reported 366 cases of measles for the week ended September 27, 1924, and 1,101 cases of this disease for the week ended September 29, 1923. One hundred and one cities reported 104 cases of measles for the week this year and 329 cases last year.

Scarlet fever.—Scarlet fever was reported for the week as follows: Thirty-five States—this year, 1,376 cases; last year, 1,763 cases. One hundred and one cities—this year, 581; last year, 611 cases; estimated expectancy, 508 cases.

Smallpox.—For the week ended September 27, 1924, 35 States reported 278 cases of smallpox. Last year, for the corresponding week, they reported 155 cases. One hundred and one cities reported smallpox for the week as follows: 1924, 82 cases; 1923, 28 cases; estimated expectancy, 25 cases. These cities reported two deaths from smallpox for the week this year.

Typhoid fever.—Seven hundred and eighty-four cases of typhoid fever were reported for the week ended September 27, 1924, by 34 States. For the corresponding week of 1923 the same States reported 782 cases. One hundred and one cities reported 279 cases of typhoid fever for the week this year and 202 cases for the week last year. The estimated expectancy for these cities was 221 cases.

Influenza and pneumonia.—Deaths from influenza and pneumonia (combined) were reported for the week by 101 cities as follows: 1924, 384 deaths; 1923, 362 deaths.

City reports for week ended September 27, 1924.

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence how many cases of the disease under consideration may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is, in most instances, the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics, or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1915 is included. In obtaining the estimated expectancy the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city.	Chicken pox, cases reported.	Diphtheria.		Influenza.		Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever.	
		Cases, estimated expectancy.	Cases reported.	Cases reported.	Deaths reported.				Cases, estimated expectancy.	Cases reported.
NEW ENGLAND.										
Maine:										
Lewiston	0	1	3	0	0	0	1	0	1	3
Portland	0	2	0	0	0	0	7	0	1	0
New Hampshire:										
Concord	0	1	0	0	0	0	0	0	0	0
Vermont:										
Barre	0	1	0	0	0	0	0	0	1	0
Burlington	1	1	1	0	0	0	0	0	1	0
Massachusetts:										
Boston	7	42	27	2	0	6	1	9	17	30
Fall River	3	5	5	1	1	0	0	0	1	3
Springfield	2	3	3	0	0	1	1	2	4	1
Worcester	1	6	4	0	0	2	0	3	4	5
Rhode Island:										
Pawtucket	0	1	5	0	0	0	0	1	1	0
Providence	0	8	7	0	0	0	0	4	4	2
Connecticut:										
Bridgeport	0	7	3	0	0	0	0	0	3	1
Hartford	0	5	1	0	0	1	0	0	3	0
New Haven	1	4	0	0	0	5	1	1	2	4
MIDDLE ATLANTIC.										
New York—										
Buffalo	0	23	8	0	0	2	0	8	10	7
New York	28	113	134	15	4	12	5	88	47	54
Rochester	----	8	0	0	0	0	----	3	4	7
Syracuse	6	10	5	0	0	3	3	3	6	4
New Jersey:										
Camden	2	4	8	0	0	0	0	0	2	1
Newark	5	12	4	0	0	4	2	7	7	7
Trenton	0	5	6	0	0	0	0	1	1	1
Pennsylvania:										
Philadelphia	11	47	56	1	0	7	10	24	23	26
Pittsburgh	27	29	31	0	1	10	8	17	16	21
Reading	1	2	3	0	0	0	2	1	1	0
Scranton	1	5	1	0	0	0	0	6	2	0
EAST NORTH CENTRAL.										
Ohio:										
Cincinnati	5	18	7	0	0	0	0	6	7	14
Cleveland	11	38	13	2	0	1	1	7	19	13
Columbus	3	7	2	0	0	0	1	3	4	0
Toledo	1	16	7	0	1	0	0	5	7	7
Indiana:										
Fort Wayne	0	3	9	0	0	0	0	1	1	1
Indianapolis	----	23	11	0	0	2	----	8	5	3
South Bend	6	1	0	0	0	0	0	1	2	3
Terre Haute	0	3	0	0	1	0	0	1	1	0
Illinois:										
Chicago	18	128	53	2	1	18	12	33	65	43
Cicero	0	5	0	0	0	0	0	2	2	0
Peoria	2	1	2	0	0	0	0	3	7	1
Springfield	----	1	4	0	0	0	----	1	2	0
Michigan:										
Detroit	8	61	36	0	0	4	4	16	37	28
Flint	1	9	4	0	0	0	4	0	4	7
Grand Rapids	1	6	1	0	0	0	0	1	4	5
Saginaw	2	2	0	0	0	0	0	0	2	1

City reports for week ended September 27, 1924—Continued.

Division, State, and city.	Chicken pox, cases reported.	Diphtheria.		Influenza.		Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever.	
		Cases, estimated expectancy.	Cases reported.	Cases reported.	Deaths reported.				Cases, estimated expectancy.	Cases reported.
EAST NORTH CENTRAL—con.										
Wisconsin:										
Madison	4	1	2	0	0	0	5	1	1	0
Milwaukee	10	18	7	0	0	3	3	0	19	5
Racine	0	1	2	0	0	1	1	0	4	1
Superior	0	1	0	0	0	0	0	1	1	0
WEST NORTH CENTRAL.										
Minnesota:										
Duluth	8	5	1	0	0	1	0	0	2	20
Minneapolis	5	27	17	0	1	1	1	2	14	36
St. Paul	----	17	34	0	0	0	----	2	8	11
Iowa:										
Davenport	0	2	1	0	----	0	0	----	1	0
Des Moines	0	8	1	0	----	0	0	----	7	2
Sioux City	0	2	1	0	----	0	0	----	1	4
Waterloo	1	1	0	0	----	0	0	----	1	0
Missouri:										
Kansas City	3	11	6	0	0	0	1	3	4	2
St. Joseph	0	2	0	0	0	0	0	1	3	0
St. Louis	6	54	11	0	0	5	3	----	19	90
North Dakota:										
Fargo	----	1	----	----	----	----	----	----	2	----
Grand Forkes	0	1	0	0	----	0	0	----	1	1
South Dakota:										
Aberdeen	----	----	0	0	----	0	----	----	----	2
Sioux Falls	0	1	4	0	0	0	0	0	1	2
Nebraska:										
Lincoln	1	1	0	0	0	0	1	0	1	1
Omaha	3	14	16	0	0	0	0	6	2	1
Kansas:										
Topeka	1	3	0	0	0	0	2	2	1	5
Wichita	0	3	2	0	0	0	0	1	3	0
SOUTH ATLANTIC.										
Delaware:										
Wilmington	0	1	3	0	0	0	0	2	2	4
Maryland:										
Baltimore	7	20	22	9	1	2	2	14	9	7
Cumberland	----	1	0	0	0	0	----	0	1	0
Frederick	----	1	0	0	0	0	----	0	0	0
District of Columbia:										
Washington	1	11	5	1	1	1	----	10	7	5
Virginia:										
Lynchburg	----	1	3	0	0	0	14	0	1	1
Norfolk	0	3	0	0	0	0	2	0	1	0
Richmond	0	14	26	0	0	0	0	1	6	6
Roanoke	0	5	1	0	0	0	0	0	1	6
West Virginia:										
Charleston	0	3	1	0	0	0	0	2	1	0
Huntington	0	4	6	0	----	0	0	----	2	2
Wheeling	0	2	0	0	0	0	0	1	2	1
North Carolina:										
Raleigh	0	4	3	0	0	0	0	3	2	0
Wilmington	0	2	0	0	0	0	0	0	1	0
Winston-Salem	5	3	12	0	0	0	0	1	1	3
South Carolina:										
Charleston	0	1	2	0	0	0	0	0	1	0
Columbia	0	3	0	0	0	0	0	1	1	0
Greenville	0	1	2	0	0	0	0	0	1	0
Georgia:										
Atlanta	0	10	8	0	1	0	0	4	6	3
Brunswick	----	0	0	0	0	0	----	0	1	0
Savannah	0	3	0	0	0	0	0	2	1	0
Florida:										
St. Petersburg	0	0	0	0	0	0	0	0	0	0
Tampa	----	2	1	1	0	0	----	1	0	0

City reports for week ended September 27, 1924—Continued.

Division, State, and city.	Chicken pox, cases reported.	Diphtheria.		Influenza.		Measles, cases reported.	Mumps, cases reported.	Pneumonia, deaths reported.	Scarlet fever.	
		Cases, estimated expectancy.	Cases reported.	Cases reported.	Deaths reported.				Cases, estimated expectancy.	Cases reported.
EAST SOUTH CENTRAL.										
Kentucky:										
Covington	0	2	3	0	0	0	1	0	1	1
Lexington	2	1	0	0	0	0	0	1	2	0
Louisville	1	12	2	0	0	1	0	6	3	2
Tennessee:										
Memphis	0	10	5	0	0	0	1	4	2	3
Nashville	----	4	0	----	2	0	----	0	4	2
Alabama:										
Birmingham	2	8	9	2	1	0	1	4	5	7
Mobile	0	2	0	0	0	0	0	0	1	2
Montgomery	0	1	3	4	0	1	1	0	1	0
WEST SOUTH CENTRAL.										
Arkansas:										
Fort Smith	0	1	1	0	----	0	0	----	1	1
Little Rock	0	1	5	0	0	0	0	----	1	0
Louisiana:										
New Orleans	0	11	6	1	1	1	0	3	2	2
Shreveport	0	----	0	0	0	0	0	2	----	0
Oklahoma:										
Oklahoma	0	2	3	0	0	0	0	0	2	1
Texas:										
Dallas	2	8	3	0	0	0	0	3	2	4
Galveston	0	1	1	0	0	0	0	2	1	0
Houston	----	2	5	0	0	0	----	1	1	1
San Antonio	----	0	3	0	0	0	----	2	0	0
MOUNTAIN.										
Montana:										
Billings	0	0	2	0	0	0	0	0	1	0
Great Falls	0	1	1	0	0	0	0	0	1	2
Helena	0	0	2	0	0	0	0	1	0	0
Missoula	0	0	0	0	0	0	0	1	0	0
Idaho:										
Boise	0	1	0	0	0	0	0	0	1	2
Colorado:										
Denver	3	14	7	0	1	2	0	6	4	3
Pueblo	0	4	1	0	0	0	1	1	1	4
New Mexico:										
Albuquerque	----	1	0	0	0	0	----	0	0	0
Utah:										
Salt Lake City	7	2	5	0	0	1	2	2	3	4
Nevada:										
Reno	0	0	0	0	0	0	0	0	1	1
PACIFIC.										
Washington:										
Seattle	6	4	13	0	----	1	7	----	7	9
Spokane	0	2	2	0	----	1	0	----	6	3
Tacoma	1	3	4	0	----	0	1	----	3	3
Oregon:										
Portland	5	4	9	0	0	0	4	4	4	4
California:										
Los Angeles	2	28	35	3	1	2	2	12	7	13
Sacramento	2	2	2	0	0	0	0	0	2	2
San Francisco	5	16	17	4	0	2	9	8	6	10

City reports for week ended September 27, 1924—Continued.

Division, State, and city	Population July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths reported.	Typhoid fever.			Whooping cough, cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
NEW ENGLAND.										
Maine:										
Lewiston	33,790	0	0	0	0	0	0	0	0	13
Portland	73,129	0	0	0	3	1	3	0	0	13
New Hampshire:										
Concord	22,408	0	0	0	0	1	0	0	0	12
Vermont:										
Barre	[1] 10,008	0	0	0	0	0	0	0	2	1
Burlington	23,613	0	0	0	0	0	0	0	1	7
Massachusetts:										
Boston	770,400	0	0	0	16	6	1	0	----	184
Fall River	120,912	0	0	0	2	2	0	0	2	29
Springfield	144,227	0	0	0	2	1	0	0	1	34
Worcester	191,927	0	0	0	0	1	0	0	0	28
Rhode Island:										
Pawtucket	68,799	0	0	0	0	0	1	0	0	16
Providence	242,378	0	0	0	5	2	3	1	1	53
Connecticut:										
Bridgeport	[1] 143,555	0	0	0	2	1	0	0	1	23
Hartford	[1] 138,036	0	0	0	1	2	2	0	7	14
New Haven	172,967	0	0	0	0	3	1	0	2	32
MIDDLE ATLANTIC.										
New York:										
Buffalo	536,718	0	0	0	11	3	1	2	18	142
New York	5,927,625	0	0	0	[2] 87	40	35	5	167	1,138
Rochester	317,867	0	2	0	0	2	2	0	----	51
Syracuse	184,511	0	0	0	1	2	0	0	0	39
New Jersey:										
Camden	124,157	0	3	0	0	2	1	0	0	28
Newark	438,699	0	0	0	6	4	3	1	41	78
Trenton	127,390	0	0	0	0	1	0	0	7	31
Pennsylvania:										
Philadelphia	1,922,788	0	0	0	40	15	11	0	68	410
Pittsburgh	613,442	0	1	0	6	4	3	0	7	142
Reading	110,917	0	0	0	0	1	3	0	10	17
Scranton	140,626	0	0	0	3	1	2	0	8	----
EAST NORTH CENTRAL.										
Ohio:										
Cincinnati	406,312	0	0	0	11	2	2	0	0	112
Cleveland	888,519	1	0	0	13	3	11	0	22	143
Columbus	261,082	0	6	0	2	1	1	0	0	69
Toledo	268,338	1	0	0	5	2	4	1	7	63
Indiana:										
Fort Wayne	93,573	1	1	0	0	1	1	0	0	34
Indianapolis	342,718	1	6	0	4	3	1	0	----	83
South Bend	70,709	0	0	0	0	0	0	0	0	10
Terre Haute	68,939	0	0	0	0	1	0	1	----	25
Illinois:										
Chicago	2,886,121	1	6	0	42	8	10	0	113	578
Cicero	55,968	0	0	0	0	0	0	0	4	9
Peoria	79,675	0	0	0	1	0	1	0	0	20
Springfield	61,833	0	0	0	0	2	6	0	----	18
Michigan:										
Detroit	995,668	2	6	0	23	7	6	1	68	223
Flint	117,968	0	2	1	2	1	0	0	4	20
Grand Rapids	145,947	1	0	0	1	1	0	0	2	28
Saginaw	69,754	0	0	0	0	1	0	0	0	17
Wisconsin:										
Madison	42,519	0	0	0	1	1	0	0	3	5
Milwaukee	484,595	1	0	0	0	1	0	0	13	90
Racine	64,393	0	0	0	0	0	1	0	0	10
Superior	[1] 39,671	0	0	0	1	0	0	0	0	8

[1] Population Jan. 1, 1920.

[2] Pulmonary only.

City reports for week ended September 27, 1924—Continued.

Division, State, and city.	Population July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths reported.	Typhoid fever.			Whooping cough, cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
WEST NORTH CENTRAL.										
Minnesota:										
Duluth	106,289	0	0	0	1	0	0	0	3	16
Minneapolis	409,125	2	15	1	7	1	4	1	2	82
St. Paul	241,891	2	2	0	2	2	1	0	----	55
Iowa:										
Davenport	61,262	1	1	----	----	0	0	----	0	----
Des Moines	140,923	1	0	----	----	0	0	----	0	----
Sioux City	79,662	0	0	----	----	1	0	----	0	----
Waterloo	39,667	0	0	----	----	0	1	----	0	----
Missouri:										
Kansas City	351,819	1	0	0	3	2	3	1	2	72
St. Joseph	78,232	0	0	0	0	0	0	0	0	30
St. Louis	803,853	0	0	0	9	6	5	4	1	175
North Dakota:										
Fargo	24,841	0	----	----	----	0	----	----	----	----
Grand Forks	14,547	0	0	----	----	0	0	----	0	----
South Dakota:										
Aberdeen	15,829	----	0	----	----	----	0	----	----	----
Sioux Falls	29,206	0	0	0	0	0	0	0	0	7
Nebraska:										
Lincoln	58,761	1	1	0	1	0	0	0	0	13
Omaha	204,382	1	1	0	0	2	1	0	0	68
Kansas:										
Topeka	52,555	0	0	0	2	1	0	0	1	14
Wichita	79,261	0	0	0	0	2	2	0	8	20
SOUTH ATLANTIC.										
Delaware:										
Wilmington	117,728	0	0	0	1	2	4	1	6	29
Maryland:										
Baltimore	773,580	0	0	0	12	12	13	2	54	162
Cumberland	32,361	0	0	0	0	1	1	0	----	7
Frederick	11,301	0	0	0	0	0	0	0	----	4
District of Columbia:										
Washington	[1] 437,571	0	1	0	13	5	3	0	12	109
Virginia:										
Lynchburg	30,277	0	0	0	0	1	0	0	3	14
Norfolk	159,089	0	0	0	3	1	1	0	0	----
Richmond	181,044	0	0	0	1	2	2	0	2	36
Roanoke	35,502	0	0	0	0	1	2	0	0	9
West Virginia:										
Charleston	45,597	0	0	0	2	0	3	2	0	22
Huntington	57,918	0	0	----	----	0	0	----	0	----
Wheeling	[1] 56,208	0	0	0	1	1	11	3	0	21
North Carolina:										
Raleigh	29,171	0	1	0	0	1	0	0	3	7
Wilmington	35,719	0	0	0	0	0	0	0	0	9
Winston-Salem	56,230	0	0	0	2	1	1	0	0	17
South Carolina:										
Charleston	71,245	0	0	0	2	2	5	0	0	21
Columbia	39,688	0	0	0	1	1	0	0	0	18
Greenville	25,789	0	1	0	0	0	0	0	1	2
Georgia:										
Atlanta	222,963	1	0	0	8	4	0	1	----	65
Brunswick	15,937	0	0	0	1	0	0	0	----	5
Savannah	89,448	0	0	0	4	1	4	0	0	34
Florida:										
St. Petersburg	24,403	0	0	0	0	0	0	1	0	7
Tampa	56,050	0	0	0	2	1	0	0	----	19
EAST SOUTH CENTRAL.										
Kentucky:										
Covington	57,877	0	0	0	0	0	0	0	0	11
Lexington	43,673	0	0	0	1	1	0	0	2	15
Louisville	257,671	0	0	0	3	5	7	0	3	79

[1] Population Jan. 1, 1920.

City reports for week ended September 27, 1924—Continued.

Division, State, and city.	Population July 1, 1923, estimated.	Smallpox.			Tuberculosis, deaths reported.	Typhoid fever.			Whooping cough, cases reported.	Deaths, all causes.
		Cases, estimated expectancy.	Cases reported.	Deaths reported.		Cases, estimated expectancy.	Cases reported.	Deaths reported.		
EAST SOUTH CENTRAL—continued.										
Tennessee:										
Memphis	170,067	0	0	0	4	1	17	2	0	42
Nashville	121,128	0	0	0	1	4	9	2	------	29
Alabama:										
Birmingham	195,901	0	5	0	7	4	16	1	2	55
Mobile	63,858	0	0	0	1	1	2	0	0	16
Montgomery	45,383	0	0	0	0	0	0	0	1	9
WEST SOUTH CENTRAL.										
Arkansas:										
Fort Smith	30,635	0	0	------	------	1	0	------	0	------
Little Rock	70,916	0	0	0	2	1	2	0	0	------
Louisiana:										
New Orleans	404,575	0	0	0	8	4	6	1	2	124
Shreveport	54,500	------	0	0	1	------	0	1	0	30
Oklahoma:										
Oklahoma	101,150	0	0	0	0	2	2	0	0	17
Texas:										
Dallas	177,274	0	0	0	4	2	2	0	11	45
Galveston	46,877	0	0	0	0	0	1	0	0	15
Houston	154,970	0	1	0	2	0	5	1	------	37
San Antonio	184,727	0	0	0	8	0	1	0	------	41
MOUNTAIN.										
Montana:										
Billings	16,927	1	0	0	0	0	0	0	2	9
Great Falls	27,787	0	0	0	0	0	0	0	3	6
Helena	[1] 12,037	0	0	0	0	0	0	0	0	8
Missoula	[1] 12,668	1	1	0	0	1	0	0	0	4
Idaho:										
Boise	22,806	0	0	0	0	0	0	0	0	2
Colorado:										
Denver	272,031	1	0	0	13	5	4	1	9	84
Pueblo	43,519	1	0	0	2	2	0	0	0	9
New Mexico:										
Albuquerque	16,648	0	0	0	2	3	2	0	------	5
Utah:										
Salt Lake City	126,241	1	0	0	1	2	14	0	0	30
Nevada:										
Reno	12,429	0	0	0	0	0	0	0	0	4
PACIFIC.										
Washington:										
Seattle	[1] 315,685	1	1	------	------	1	2	------	1	------
Spokane	104,573	2	2	------	------	1	3	------	3	------
Tacoma	101,731	0	0	------	------	0	1	------	0	------
Oregon:										
Portland	273,621	3	1	0	3	2	2	0	4	------
California:										
Los Angeles	666,853	1	15	0	19	6	5	1	8	183
Sacramento	69,950	0	4	0	0	1	1	0	0	13
San Francisco	539,038	1	0	0	6	1	7	1	0	130

[1] Population Jan. 1, 1920.

City reports for week ended September 27, 1924—Continued.

Division, State, and city.	Cerebrospinal meningitis.		Dengue.		Lethargic encephalitis.		Pellagra.		Poliomyelitis (infantile paralysis).			Typhus fever.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases, est. expectancy.	Cases.	Deaths.	Cases.	Deaths.
NEW ENGLAND.													
Massachusetts:													
Boston	0	0	0	0	1	0	0	0	2	4	1	0	0
Fall River	0	0	0	0	0	0	0	0	0	1	0	0	0
Springfield	1	0	0	0	0	0	0	0	0	0	0	0	0
Worcester	0	0	0	0	0	0	0	0	0	1	0	0	0
Connecticut:													
Hartford	0	0	0	0	0	0	0	0	0	1	0	0	0
MIDDLE ATLANTIC.													
New York:													
Buffalo	0	0	0	0	1	0	0	0	0	1	0	0	0
New York	2	0	0	0	7	6	0	0	15	23	2	1	0
Rochester	1	0	0	0	0	0	0	0	1	1	0	0	0
Syracuse	0	0	0	0	0	0	0	0	1	4	0	0	0
New Jersey:													
Trenton	0	0	0	0	0	0	0	0	0	2	1	0	0
Pennsylvania:													
Philadelphia	0	1	0	0	1	0	0	0	1	5	1	0	0
Pittsburgh	0	0	0	0	0	0	0	0	0	0	2	0	0
EAST NORTH CENTRAL.													
Ohio:													
Cleveland	2	0	0	0	0	0	0	0	1	0	0	0	0
Columbus	0	0	0	0	0	0	0	0	0	1	1	0	0
Toledo	0	0	0	0	0	0	0	0	0	1	0	0	0
Illinois:													
Chicago	1	0	0	0	1	0	0	0	4	2	0	0	0
Peoria	0	0	0	0	0	0	0	0	0	0	1	0	0
Michigan:													
Detroit	1	1	0	0	3	0	0	0	1	21	6	0	0
Flint	0	0	0	0	0	0	0	0	1	2	0	0	0
Grand Rapids	0	0	0	0	0	0	0	0	0	3	0	0	0
Saginaw	0	1	0	0	0	0	0	0	0	0	0	0	0
WEST NORTH CENTRAL.													
Minnesota:													
St. Paul	0	0	0	0	0	0	0	0	1	2	1	0	0
Missouri:													
Kansas City	0	0	0	0	0	0	0	0	0	1	0	0	0
St. Louis	0	0	0	0	0	0	0	0	1	2	0	0	0
SOUTH ATLANTIC.													
Delaware:													
Wilmington	0	0	0	0	0	0	0	0	1	1	1	0	0
Maryland:													
Baltimore	1	0	0	0	0	0	1	0	1	6	0	0	0
South Carolina:													
Columbia	0	0	0	0	0	0	0	1	0	0	0	0	0
Georgia:													
Atlanta	0	0	0	0	0	0	0	2	0	0	0	0	0
Savannah	0	0	1	0	0	0	0	0	0	0	0	0	0
Florida:													
St. Petersburg	0	0	3	0	0	0	0	0	0	0	0	0	0
WEST SOUTH CENTRAL.													
Louisiana:													
New Orleans	0	0	0	0	1	1	0	0	0	0	0	0	0
Shreveport	0	0	0	0	0	0	0	1	------	0	0	0	0
Texas:													
Houston	0	0	0	0	0	0	1	0	0	0	0	0	0
MOUNTAIN.													
Montana:													
Billings	0	0	0	0	0	0	0	0	0	0	1	0	0
Helena	0	1	0	0	0	0	0	0	0	1	0	0	0
Missoula	0	0	0	0	0	0	0	0	0	10	0	0	0
PACIFIC.													
Washington:													
Seattle	0	------	0	------	0	------	0	------	0	19	------	0	------
Spokane	0	------	0	------	0	------	0	------	0	9	------	0	------
Tacoma	0	------	0	------	0	------	0	------	0	30	------	0	------
California:													
Los Angeles	1	0	0	0	1	0	0	0	0	2	0	0	0

The following table gives a summary of the reports from 105 cities for the 10-week period ended September 27, 1924. The cities included in this table are those whose reports have been published for all 10 weeks in the Public Health Reports. Eight of these cities did not report deaths. The aggregate population of the cities reporting cases was estimated at nearly 29,000,000 on July 1, 1923, which is the latest date for which estimates are avilable. The cities reporting deaths had more than 28,000,000 population on that date. The number of cities included in each group and the aggregate population are shown in a separate table below.

Summary of weekly reports from cities, July 20 to September 27, 1924.

DIPHTHERIA CASES.

	1924, week ended—									
	July 26.	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 23.	Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.
Total	560	477	538	456	494	480	455	521	649	779
New England	59	47	60	47	48	35	49	[1] 35	56	55
Middle Atlantic	222	188	197	149	189	167	139	139	177	255
East North Central	99	83	103	91	88	[2] 69	85	88	[3] 125	151
West North Central	37	40	43	38	49	50	47	91	90	[4] 92
South Atlantic	21	28	22	40	39	[5] 68	70	[6] 73	94	89
East South Central	6	3	6	7	9	8	7	7	13	22
West South Central	15	12	7	13	15	11	10	18	13	24
Mountain	14	5	10	22	14	16	19	12	15	18
Pacific	87	71	90	49	43	56	29	58	[7] 66	73

MEASLES CASES.

Total	528	406	253	178	136	121	109	102	87	104
New England	59	41	11	23	23	26	11	[1] 14	9	6
Middle Atlantic	204	160	97	65	46	41	56	40	36	3
East North Central	155	126	75	51	37	[2] 25	18	25	[3] 28	1
West North Central	22	16	11	7	4	9	3	4	2	[4] 2
South Atlantic	43	34	36	16	10	[5] 11	11	[6] 11	8	3
East South Central	6	3	2	4	5	1	1	1	0	7
West South Central	5	3	0	1	1	0	1	0	1	29
Mountain	6	7	3	1	1	4	2	4	0	38
Pacific	28	16	18	10	9	4	6	3	[7] 3	15

SCARLET FEVER CASES.

Total	340	369	360	248	291	307	253	359	462	586
New England	38	40	36	24	28	29	35	[1] 33	38	46
Middle Atlantic	90	73	85	49	55	69	50	48	97	128
East North Central	90	126	108	57	74	[2] 74	68	97	[3] 99	123
West North Central	65	65	61	61	75	58	48	104	142	[4] 172
South Atlantic	15	20	21	12	21	[5] 26	22	[6] 24	32	36
East South Central	7	2	3	10	13	9	2	6	14	17
West South Central	9	11	5	9	5	5	5	10	10	8
Mountain	5	7	12	5	4	17	3	10	9	16
Pacific	21	25	29	21	16	20	20	27	21	40

[1] Figures for Barre, Vt., estimated. Reports not received at time of going to press.
[2] Figures for Cleveland, Ohio, estimated.
[3] Figures for Superior, Wis., estimated.
[4] Figures for Fargo, N. Dak., estimated.
[5] Figures for Raleigh, N. C., estimated.
[6] Figures for Wilmington, Del., and Tampa, Fla., estimated.
[7] Figures for Seattle, Spokane, and Tacoma, Wash., estimated.

Summary of weekly reports from cities, July 20 to September 27, 1924—Continued.

SMALLPOX CASES.

	1924, week ended—									
	July 26.	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 23.	Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.
Total	108	116	106	93	71	88	66	64	87	83
New England	0	0	0	0	0	0	0	[1] 0	0	0
Middle Atlantic	9	9	7	8	3	11	4	2	3	6
East North Central	36	28	23	16	20	[2] 12	9	16	[3] 14	27
West North Central	13	18	15	28	5	25	9	11	23	[4] 18
South Atlantic	3	3	4	6	4	[5] 2	5	[6] 2	1	3
East South Central	13	16	8	13	14	13	16	3	8	5
West South Central	0	2	0	0	1	1	1	4	3	1
Mountain	2	2	1	1	2	2	0	0	2	1
Pacific	32	38	48	21	22	22	22	26	[7] 33	22

TYPHOID FEVER CASES.

Total	191	191	250	232	238	220	199	229	197	281
New England	6	4	6	15	8	12	6	[1] 9	12	11
Middle Atlantic	59	59	63	63	65	41	50	59	54	59
East North Central	17	20	30	29	22	[2] 22	27	31	[3] 25	39
West North Central	11	9	22	22	17	28	11	19	21	[4] 17
South Atlantic	25	31	44	37	35	[5] 34	36	[6] 47	32	50
East South Central	29	36	40	24	49	48	32	25	15	51
West South Central	22	17	19	26	29	25	10	15	15	17
Mountain	7	4	5	9	0	7	13	9	8	18
Pacific	15	11	21	7	13	3	14	15	[7] 15	19

INFLUENZA DEATHS.

Total	3	13	8	8	7	13	4	6	7	18
New England	1	2	0	0	0	1	0	[1] 0	1	1
Middle Atlantic	0	6	3	4	1	4	3	2	1	5
East North Central	0	0	2	2	2	[2] 3	0	3	[3] 0	2
West North Central	1	2	0	0	0	0	0	0	1	[4] 1
South Atlantic	1	1	2	0	3	[5] 2	1	[6] 1	1	3
East South Central	0	1	0	0	0	1	0	0	0	3
West South Central	0	0	1	0	1	2	0	0	3	1
Mountain	0	0	0	0	0	0	0	0	0	1
Pacific	0	1	0	2	0	0	0	0	0	1

PNEUMONIA DEATHS.

Total	304	292	269	271	251	315	313	306	308	371
New England	16	17	14	14	12	19	14	[1] 16	12	20
Middle Atlantic	126	131	121	115	102	136	152	120	125	152
East North Central	58	50	51	48	48	[2] 55	53	53	[3] 67	82
West North Central	13	14	9	17	13	18	9	23	22	[4] 17
South Atlantic	35	36	29	32	38	[5] 34	32	[6] 37	37	42
East South Central	15	12	10	10	5	12	17	15	9	14
West South Central	20	11	14	12	10	11	8	10	13	13
Mountain	7	4	8	7	10	13	11	10	8	11
Pacific	14	17	13	16	13	17	17	22	15	20

[1] Figures for Barre, Vt., estimated. Reports not received at time of going to press.
[2] Figures for Cleveland, Ohio, estimated.
[3] Figures for Superior, Wis., estimated.
[4] Figures for Fargo, N. Dak., estimated.
[5] Figures for Raleigh, N. C., estimated.
[6] Figures for Wilmington, Del., and Tampa, Fla., estimated.
[7] Figures for Seattle, Spokane, and Tacoma, Wash., estimated.

Number of cities included in summary of weekly reports and aggregate population of cities in each group, estimated as of July 1, 1923.

Group of cities.	Number of cities reporting cases.	Number of cities reporting deaths.	Aggregate population of cities reporting cases.	Aggregate population of cities reporting deaths.
Total	105	97	28,898,350	28,140,934
New England	12	12	2,098,746	2,098,746
Middle Atlantic	10	10	10,304,114	10,304,114
East North Central	17	17	7,032,535	7,032,535
West North Central	14	11	2,515,330	2,381,454
South Atlantic	22	22	2,566,901	2,566,901
East South Central	7	7	911,885	911,885
West South Central	8	6	1,124,564	1,023,013
Mountain	9	9	546,445	546,445
Pacific	6	3	1,797,830	1,275,841

FOREIGN AND INSULAR.

BOLIVIA.

Communicable Diseases—La Paz—August, 1924.

During the month of August, 1924, communicable diseases were reported at La Paz, Bolivia, as follows:

Disease.	Cases.	Deaths.	Disease.	Cases.	Deaths.
Cerebrospinal meningitis	2		Scarlet fever	5	3
Dysentery	3	5	Smallpox	16	9
Influenza	4	7	Tuberculosis	4	5
Measles	1	4	Typhoid fever	6	4

Total number of deaths from all causes, 234. Population, estimated, 100,000. Information as to new cases, received from General Hospital; statement of deaths received from cemetery authorities.

CANADA.

Communicable Diseases—Ontario—August 31–September 27, 1924 (Comparative).

During the four-week period ended September 27, 1924, communicable diseases were notified in the Province of Ontario, Canada, as follows:

Disease.	Aug. 31–Sept. 27, 1924.		Sept. 2–29, 1923.	
	Cases.	Deaths.	Cases.	Deaths.
Cerebrospinal meningitis	7	7	2	2
Chancroid			6	
Chicken pox	106			
Diphtheria	188	6	245	17
Dysentery		8	(1)	
German measles	6			
Gonorrhea	175		222	
Influenza	6	1	13	7
Lethargic encephalitis	5	3	(1)	
Measles	233		95	
Mumps	100			
Paratyphoid fever	5		(1)	
Pneumonia		83		93
Poliomyelitis (infantile paralysis)	35	2	6	2
Scarlet fever	195	1	270	6
Septic sore throat	6		(1)	
Smallpox	13		29	
Syphilis	86		173	
Tetanus		2	(1)	
Tuberculosis	[2] 119	61	169	74
Typhoid fever	114	15	131	25
Whooping cough	225	5	234	8

Population, 2,182,947.
[1] Not reported in 1923.
[2] Only 40 per cent reported.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana, Cuba, as follows:

Disease	Sept. 1–10, 1924.		Remaining under treatment Sept. 10, 1924.
	New cases.	Deaths.	
Chicken pox	1		
Diphtheria	1		2
Leprosy			15
Malaria	8		[1] 37
Measles	3		1
Paratyphoid fever			2
Scarlet fever	2		4
Typhoid fever	28	3	[2] 129

[1] From the interior, 15. [2] From the interior, 40.

Typhoid fever—Santiago.

Information dated September 30, 1924, shows the presence of typhoid fever at Santiago, Cuba, with four reported cases during the week ended September 27 and a number of unreported cases believed to exist in the city.

EGYPT.

Status of Plague.

Plague has been reported in Egypt as follows: Week ended August 26, 1924, two cases, of which one case was notified at Port Said. Week ended September 2, 1924, five cases occurring in three districts.

Summary.—Total number of cases reported in Egypt from January 1 to September 2, 1924, 354, as against 1,337 cases reported for the corresponding period of the year 1923.

GREAT BRITAIN.

Typhus Fever—St. Helens.[1]

An additional case of typhus fever was reported at St. Helens, England, Great Britain, September 20, 1924. The case was stated to have been under observation in hospital since August 31, 1924. Total number of cases reported to date, eight, with four deaths.

HAWAII.

Plague-Infected Rodents—Vicinity of Honokaa.

During the period August 19 to September 10, 1924, five plague-infected rodents were reported found in the vicinity of Honokaa, Hawaii. Of these, two were found dead September 6 and 8, respectively, and three trapped August 19 and September 6 and 10, respectively.

[1] See Public Health Reports, Sept. 19, 1924, p. 2447, and Sept. 26, 1924, p. 2493.

JAPAN.

Typhoid Fever—Tokyo.[1]

Typhoid fever has been reported at Tokyo, Japan, as follows: Week ended August 16, 1924, 162 cases with 25 deaths; two weeks ended August 30, 1924, 353 cases with 52 deaths. Present officially estimated population, 347,608, including 1,189 foreigners.

LATVIA.

Communicable Diseases—July, 1924.

During the month of July, 1924, communicable diseases were reported in the Republic of Latvia, as follows:

Disease.	Cases.	Disease.	Cases.
Anthrax	1	Mumps	14
Cerebrospinal meningitis	5	Scarlet fever	82
Diphtheria	36	Smallpox	1
Dysentery	33	Typhoid fever	227
Malaria	2	Typhus fever	9
Measles	72	Whooping cough	41

Population, 1,900,000.

POLAND.

Communicable Diseases—July 27–August 2, 1924.

Communicable diseases were reported during the week ended August 2, 1924, in Poland, as follows:

Disease.	Cases.	Deaths.	Districts showing greatest number of deaths.
Cerebrospinal meningitis	5	4	Lodz.
Diphtheria	70	7	Volhynia.
Dysentery	417	55	Stanislawow.
Malaria	60		
Measles	97	1	Warsaw.
Relapsing fever	3		
Scarlet fever	247	26	Lwow.
Smallpox	8		
Typhoid fever	280	31	Lodz.
Typhus fever	67	4	Warsaw.
Whooping cough	75	14	Lwow.

SPAIN.

Mortality from Certain Diseases—Barcelona—July, 1924.

During the month of July, 1924, mortality from certain causes was reported in the Province of Barcelona, Spain, as follows:

Disease.	Deaths.	Disease.	Deaths.
Bronchitis	48	Pneumonia	41
Cancer	25	Tuberculosis	23
Diphtheria	9	Typhoid fever	68
Measles	46	Whooping cough	4
Meningitis	118		

Population, 1,054,541. Total deaths from all causes, 2,308.

[1] Public Health Reports, Sept. 19, 1924, p. 2447; Sept. 26, 1924, p. 2493.

SUMATRA.

Malaria—Batoe Bahra—May, 1924.[1]

During the month of May, 1924, 212 cases of malaria, with 24 fatalities, were reported at Batoe Bahra, Island of Sumatra.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

The reports contained in the following tables must not be considered as complete or final as regards either the lists of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended October 17, 1924.[2]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Shanghai	Aug. 2–Sept. 6	1		
India:				
Bombay	Aug. 17–23	7	4	
Calcutta	Aug. 24–30	8	7	
Madras	Aug. 31–Sept. 6	1	1	
Rangoon	Aug. 17–23	1		
Siam:				
Bangkok	Aug. 10–16	1		

PLAGUE.

Egypt				Aug. 20–Sept. 5, 1924: Cases, 7. Jan. 1–Sept. 5, 1924: Cases, 354. Corresponding period, year 1923, 1,337 cases.
Port Said	Aug. 20–26	1		
Hawaii:				
Honokaa				Aug. 19–Sept. 10, 1924: Five plague-infected rodents found in vicinity.
India:				
Bombay	Aug. 17–23	8	4	
Karachi	Sept. 2–8	3	3	
Madras Presidency	Aug. 31–Sept. 6	14	6	
Rangoon	Aug. 17–23	26	24	
Syria:				
Beirut	Aug. 11–20	2		

SMALLPOX.

Bolivia:				
La Paz	Aug. 1–31	16	9	
British East Africa:				
Kenya—				
Tanganyika Territory	Aug. 17–23	1		
British South Africa:				
Northern Rhodesia	Aug. 12–18	2		
Canada:				
British Columbia—				
Vancouver	Sept. 14–20	7		
Ontario				Aug. 31–Sept. 27, 1924: Cases, 13.
China:				
Amoy	Aug. 23–29			Present.
Chungking	Aug. 24–30			Do.
Dominican Republic:				
La Romana	Do.	2		
Egypt:				
Cairo	June 18–24	6	3	
Do	June 25–July 1	7		
Port Said	Sept. 3–9	1		
Gibraltar	Sept. 8–21	4		

[1] See Public Health Reports, Jan. 18, 1924, p. 134; Feb. 15, 1924, p. 320; and Sept. 26, 1924, p. 2495.
[2] From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended October 17, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Aug. 17–23	9	7	
Calcutta	Aug. 24–30	3	3	
Karachi	Sept. 2–8	1	1	
Madras	Aug. 30–Sept. 6	14	4	
Rangoon	Aug. 17–23	5	3	
Java:				
East Java—				
Soerabaya	Aug. 3–9	101	21	
West Java—				
Batavia	Aug. 16–22	5		Province.
Latvia				July 1–31, 1924: 1 case.
Mexico:				
Vera Cruz	Sept. 21–27		1	
Poland				July 21–27, 1924: Cases, 8.
Portugal:				
Lisbon	Aug. 11–Sept. 6	5	1	
Switzerland:				
Berne	Aug. 30–Sept. 6	1		
Tunis:				
Tunis	Sept. 16–22	1		
Union of South Africa:				
Cape Providence				Aug. 17–23, 1924: Outbreaks.
Transvaal				Do.

TYPHUS FEVER.

Chile:				
Talcahuano	Aug. 31–Sept. 6		2	Sept. 6, 1924: About 31 cases in vicinity.
Valparaiso	Do		2	
Egypt:				
Alexandria	Aug. 20–26	1	1	
Cairo	June 18–24	1	1	
Do	June 25–July 1	1		
Great Britain:				
St. Helens	Sept. 20	1		Case was under observation in hospital from Aug. 31, 1924.
Palestine:				
Jerusalem	Sept. 2–8	1		
Safad	Aug. 26–Sept.	1		
Poland				July 21–27, 1924: Cases, 67; deaths, 4.
Union of South Africa:				
Cape Province				Aug. 17–23, 1924: Outbreaks.
Transvaal				Do.

Reports Received from June 28 to October 10, 1924.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India				Apr. 20–June 28, 1924: Cases, 81,035; deaths, 56,740.
Do				June 29–Aug. 9, 1924: Cases, 47,419; deaths, 27,794.
Bombay	May 4–10	1		
Do	June 29–Aug. 16	18	10	
Calcutta	May 11–June 28	293	259	
Do	June 29–Aug. 30	135	116	
Madras	June 1–21	7	6	
Do	June 29–Aug. 23	24	14	
Rangoon	May 11–June 28	98	76	
Do	June 29–Aug. 9	23	22	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to October 10, 1924—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China				Jan. 1–May 31, 1924: Cases, 78; deaths, 37. Corresponding period 1923: Cases, 125; deaths, 37.
Saigon	Apr. 27–June 28	6	4	Including 100 square kilometers of surrounding country.
Do	June 29–Aug. 9	6	5	Do.
Persia:				
Bushire	June 1–30	1	1	
Philippine Islands				June 15–28, 1924: 32 cases, 22 deaths, including suspects. June 29–July 5, 1924: 5 cases, 4 deaths.
Manila	June 22–28	1		Suspect. Occurring in a nonresident.
Do	July 6–12	1	1	
Province—				
Batangas	July 1–12	4	3	
Bulacan	June 21	1	1	
Do	June 28–July 4	1		
Cagayan	Mar. 30–Apr. 5	1	1	
Laguna	May 18–24	1	1	
San Pablo	July 13–19	1	1	
Rizal	July 3	1	1	
Santo Tomas	July 6–12	1	1	
Russia:				
Rostov-on-Don	Aug. 5–7	3		
Siam:				
Bangkok	May 4–June 28	21	18	
Do	June 29–Aug. 2	7	4	
Straits Settlements:				
Penang	June 1–7	1	1	
Singapore	June 15–28	9	6	
Do	June 29–July 5	2	1	
On vessel:				
S. S. Argalia		1		At Bassein, Lower Burma, India. Case in European member of crew. Case removed to hospital. Vessel left May 16, 1924, arrived June 8 at Durban, South Africa; left Durban June 10 for Trinidad and Cuba.

PLAGUE.

Algeria:				
Mostaganem	July 21–28	4		Seaport.
Argentina:				
Chaco Territory				April, 1921: Cases reported.
Brazil:				
Porto Alegre	July 6–12		1	
British East Africa:				
Kenya—				
Kisumu	July 13–Aug. 16	2		
Tanganyika Territory	Feb. 24–June 7	1	2	
Do	June 26–July 3	3	2	
Uganda				May 1–31, 1924: Cases, 28, deaths, 23. June 1–30, 1924: Cases, 97; deaths, 84.
Entebbe	Feb. 1–Apr. 30	59	54	
Canary Islands:				
Teneriffe—				
La Laguna	June 20	1		
Celebes:				
Macassar and Menando	July 27–Aug. 2			1 plague rat.
Ceylon:				
Colombo	May 11–June 28	11	7	10 plague rodents.
Do	June 29–Aug. 16	17	15	Plague-infected rodents, 17.
Chile:				
Antofagasta	June 1–16	4		
China:				
Amoy	June 15–28		6	
Do	June 29–Aug. 9		13	
Foochow	May 4–June 21		25	Cases not reported.
Nanking	July 20–Aug. 16			Present.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to October 10, 1924—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ecuador:				
Eloy Alfaro	May 16-31	1		
Guayaquil	May 16-June 30	4	1	Rats taken, 23,717; found infected, 107.
Do	July 1-Aug. 31	2		Rats taken, 34,185; found plague-infected, 93.
Posorja	July 1-15	1		
Puna	July 16-31	1		
Egypt				July 2-Aug. 5, 1924: Cases, 12. Total, Jan. 1-Aug. 28, 1924—cases, 350; deaths, 177; corresponding period, preceding year—cases, 1,286.
City—				
Alexandria		1	1	First case, Apr. 2; last, Apr. 2.
Ismailia		1	1	First case, July 6; last, July 6.
Port Said		4	2	First case, Apr. 21; last, Aug. 21.
Suez		15	8	First case, Jan. 2; last, Aug. 10.
Province—				
Assiout		44	35	First case, Apr. 1; last, Aug. 27.
Behera		1	1	First case, Aug. 9; last, Aug. 9.
Beni-Suef		3	3	First case, June 21; last, June 21.
Charkieh		1	1	First case, Jan. 31; last, Jan 31.
Fayoum		106	33	First case, Feb. 18; last, July 18.
Gharbia		3	2	First case, Apr. 21; last, Aug. 22.
Ghirga		10	3	First case, Jan. 17; last, May 13.
Kalioubiah		10	1	First case, Jan. 6; last, May 22.
Kena		44	26	First case, Apr. 9; last, May. 17.
Menoufieh		49	32	First case, Jan. 2; last, June 28.
Minia		58	28	First case, Feb. 5; last, Aug. 1.
Greece:				
Kalamata				Reported July 15, 1924: Cases, 29; deaths, 6.
Patras	July 7	36		
Saloniki	July 3-4	2		
Hawaii				July 15, 1924: Near Kukuihaele, Island of Hawaii, 1 plague rat.
India				Apr. 20-June 28, 1924: Cases, 192,874; deaths, 84,656.
Do				June 29-Aug. 9, 1924: Cases, 3,639; deaths, 3,214.
Bombay	May 4-June 21	50	44	
Do	June 29-Aug. 16	11	10	
Calcutta	May 11-June 14	10	10	
Karachi	May 18-June 21	16	13	
Do	Aug. 17-23	2	2	
Madras Presidency	May 18-31	7	2	
Do	Aug. 10-16	28	19	
Rangoon	May 11-June 28	77	72	
Do	June 29-Aug. 16	128	124	
Indo-China				Jan. 1-May 31, 1924: Cases, 706; deaths, 463.
Saigon	May 4-June 28	10	2	Including 100 square kilometers of surrounding country.
Do	July 20-Aug. 9	3	1	Do.
Iraq:				
Bagdad	Apr. 20-June 21	121	66	
Do	June 29-Aug. 9	7	4	
Japan				July 1-31, 1924: 1 case, 1 death. Jan.-July, 1924: Cases, 4; deaths, 3.
Shizuoka Prefecture—				
Higashi				To June 20, 1924: Cases, 2; death, 1.
Java:				
East Java—				
Soerabaya	June 18-21	14	14	
Madagascar:				
Diego Suarez	June 22-July 10	14	8	Seaport.
Moramanga	June 1-30	1	1	Interior.
Tamatave	June 6-30	5	4	Bubonic.
Tananarive Province				Apr. 1-June 30, 1924: Cases, 138; deaths, 128; bubonic, pneumonic, septicemic. July 1-31, 1924: Cases, 53; deaths, 53.
Tananarive Town	Apr. 1-June 30	12	12	
Do	July 1-31	5	5	Bubonic and pneumonic.
Other localities	Apr. 1-June 30	105	97	
Do	July 1-31	48	48	Bubonic, pneumonic, and septicemic.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to October 10, 1924—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Persia:				
Abadan	May 1-31	20	12	
Bander Abbas	do	11	6	
Bushire	do	1	1	Landed at quarantine.
Mohammerah	do	111	78	
Peru				May 1-June 30, 1924: Cases, 9; deaths, 6.
Do				July 1-31, 1924: Cases, 6; deaths, 3.
Callao	June 1-30	1		
Do	July 1-31	2		
Huaral	June 1-30	1		
Do	July 1-31	1		
Lima (city)	May 1-June 30	5	5	
Lima (country)	do	1		
Do	July 1-31		1	
Mollendo	do	1	1	
Russia:				
Don Cossack Territory—				
Salsky District				Aug. 8, 1924: Reported present in marmots in 6 localities.
Siam:				
Bangkok	May 4-June 14	3	3	
Do	July 13-Aug. 2	2	2	
South Nigeria (West Africa):				
Lagos	Sept. 8			Present.
Syria:				
Beirut	July 10-Aug. 10	5		
Union of South Africa				Apr. 27-June 7, 1924: Cases, 28; deaths, 14. Dec. 16, 1923, to May 31, 1924: Cases, 347; deaths, 208 (white, 51 cases, 26 deaths; native, 269 cases, 182 deaths). July 1-31, 1924: cases, 4; deaths, 2.
Orange Free State				May 11-June 14, 1924: Cases, 21; deaths, 9. June 22-28, 1924: Plague-infected mouse found in Kroonstad District.
Smithfield District	July 13-19	2		In natives on two farms.
On vessel:				
S. S. Amboise	July 10	1		At Marseilles, France; removed to quarantine station. Case occurred in an Arab fireman embarked at Aden. Vessel left Yokohama, May 30 and Colombo, Ceylon, June 22, 1924.

SMALLPOX.

Arabia:				
Aden	July 20-26		1	
Bolivia:				
La Paz	May 1-June 30	10	9	
Do	July 1-31	5	3	
Brazil:				
Bahia	May 18-24	1		
Porto Alegre	May 18-Aug. 2	1	5	
Rio de Janeiro	May 18-24	2		
Do	July 20-Aug. 30	5		
British East Africa:				
Kenya—				
Mombasa	May 4-31	3		
Tanganyika Territory	June 15-21	1		
Uganda—				
Entebbe	Feb. 1-29	2		
British South Africa:				
Northern Rhodesia	May 6-June 30	74	1	Natives.
Do	July 1-Aug. 11	35		
Canada:				
British Columbia—				
Vancouver	June 15-28	11		
Do	June 29-Sept. 6	33		Not including suburbs.
Victoria	Aug. 3-9	1		
Manitoba—				
Winnipeg	July 13-Aug. 1	3		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to October 10, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
New Brunswick—				
Restigouche County	June 1–30	7		
Do	July 6–Sept. 6	21		
Westmoreland County	Aug. 17–23	1		
Ontario				June 1–30, 1924: Cases, 24. July 1–31: Cases, 7.
Sarnia	July 20–26	1		
Windsor	June 22–28	1		
Quebec—				
Montreal	June 8–14	1		
Do	Sept. 14–20	1		
Ceylon:				
Colombo	July 6–12	1		
Chile:				
Antofagasta	June 11			Under treatment at lazaretto, 2 cases.
Do	Aug. 24–30	1		
Valparaiso	June 1–7		1	This report covers the two principal districts of Valparaiso.
China:				
Amoy	May 11–June 28			Present.
Do	June 29–Aug. 16			Do.
Antung	June 9–29	41	3	
Do	July 7–13	4		
Chungking	May 11–June 28			Do.
Do	June 29–Aug. 16			Do.
Foochow	May 18–June 28			Do.
Do	July 6–Aug. 23			Do.
Hongkong	May 4–June 28	30	24	
Do	June 29–July 12	3	3	
Manchuria—				
Dairen	May 12–June 28	22	7	
Do	June 29–Aug. 10	4	1	
Harbin	May 13–June 23	2		
Nanking	May 18–June 28			Do.
Do	July 6–Aug. 16			Do.
Shanghai	May 25–31		1	
Tientsin	May 4–June 28	11	1	British municipality.
Chosen:				
Fusan	May 1–31	1		
Do	July 25–31	1		
Colombia:				
Barranquilla	Aug. 3–9		1	
Czechoslovakia				Apr. 1–June 30, 1924: Cases, 7; deaths, 2.
State—				
Bohemia	Apr. 1–June 30	6	2	
Russinia	do	1		
Denmark:				
Copenhagen	May 18–31	3	1	
Egypt:				
City—				
Alexandria	June 4–10	1		
Cairo	Feb. 19–June 17	157	42	
Port Said	June 18–24	1	2	
Do	June 25–July 8	3		
France:				
Limoges	Apr. 1–May 31		2	
Marseille	May 1–31		1	
Paris	May 21–31	2		
Gibraltar	July 21–Aug. 31	4		
Great Britain:				
England and Wales				May 25–June 28, 1924: Cases, 342; June 29–July 26, 1924: Cases, 213.
Counties—				
Derby	May 25–June 28	159		
Do	June 29–July 26	66		
Liverpool	Aug. 28	1		Mild. Admitted to port hospital from Lower Bebington District, 2 miles from docks.
London	June 29–July 26	1		
Northumberland	May 25–June 28	61		
Do	June 29–July 26	39		
Nottingham	May 25–June 28	29		
Do	June 19–July 26	32		
Sheffield	Aug. 25–31	1		
Yorks (North Riding).	May 25–June 28	54		
Do	June 29–July 26	27		
Yorks (West Riding).	May 25–June 28	5		
Do	June 29–July 26	27		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to October 10, 1924—Continued

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Saloniki	Apr. 21–June 15	7	9	
Haiti:				
Port au Prince	July 6–12	2		Developed at Cape Haitien.
Hungary:				
Budapest	July 20–Aug. 2	11		
India				Apr. 20–June 28, 1924: Cases, 28,396; deaths, 6,753.
Do				June 29–Aug. 9, 1924: Cases, 7,483; deaths, 1,927.
Bombay	May 4–June 28	432	299	
Do	June 29–Aug. 16	160	101	
Calcutta	May 11–June 28	36	32	
Do	July 6–Aug. 23	51	36	
Karachi	May 18–June 28	51	18	
Do	June 29–Aug. 30	31	13	
Madras	May 18–June 28	32	10	
Do	June 29–Aug. 30	103	36	
Rangoon	May 11–June 28	53	21	
Do	June 29–Aug. 16	22	8	
Indo-China				Jan. 1–May 31, 1924: Cases, 4,700; deaths, 1,353.
Saigon	Apr. 27–June 28	145	79	Including 100 sq. km. of surrounding country.
Do	June 29–Aug. 2	43	16	Do.
Iraq:				
Bagdad	Apr. 20–May 24	8	1	
Do	July 27–Aug. 2	1		
Italy:				
Messina	May 26–June 1	1		
Jamaica				June 1–28, 1924: Cases, 141. June 29–Sept. 13, 1924: Cases, 217. (Reported as alastrim.)
Kingston	June 1–28	6		Reported as alastrim.
Do	June 29–Sept. 13	20		Do.
Japan				July 1–31, 1924: Cases, 51; deaths, 9. Jan. 1–July 31, 1924: Cases, 1,693; deaths, 264.
Kobe	May 26–June 21	3		
Nagoya	June 8–14	2		
Tokyo	do	1		
Java:				
East Java—				
Madoera Residency—				
Sampang	May 22			Epidemic.
Malang	May 25–31	5	1	
Pasoeroean Residency	July 4–26	7		
Soerabaya	Apr. 13–June 28	501	143	
Do	June 29–Aug. 2	248	76	Epidemic Aug. 5, 1924.
West Java—				
Batavia	May 31–June 27	3		
Do	July 6–12	1		
Latvia				Apr. 1–June 30, 1924: Cases, 4.
Mexico:				
Durango	June 1–30		2	
Guadalajara	May 1–June 30	9	4	
Do	July 8–14		1	
Mexico City	May 4–June 28	96		Including municipalities in Federal district.
Do	June 29–Sept. 6	62		Do.
Salina Cruz	May 25–31	1	1	
Tampico	June 14–20	2		
Do	July 1–Aug. 20	8	7	
Tuxtepec	July 3–18	3	1	State of Oaxaca.
Palestine				June 17–23, 1924: 20 cases in northern districts.
Samaria Province—				
Samak	May 27–June 2	1		
Paraguay:				
Asuncion	June 2			Present.
Encarnacion	do			Many cases reported.
Persia:				
Bushire	June 1–30	2		
Peru:				
Arequipa	Jan. 1–June 30		5	
Poland				Mar. 30–June 28, 1924: Cases, 209; deaths, 27.
Do				June 29–July 26, 1924: Cases, 17; deaths, 5.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to October 10, 1924—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portugal:				
Lisbon	May 25–June 28	7	2	
Do	June 29–Aug. 23	15	1	
Oporto	May 11–June 28	18	16	
Do	June 29–Sept. 13	21	19	
Russia				Jan. 1–31, 1924: 2,243 cases.
Moscow	July 27–Aug. 9	37		
Siam:				
Bangkok	Apr. 27–June 14	3	5	
Spain:				
Barcelona	July 31–Aug. 6		1	Year 1923: Cases, 160.
Cadiz	June 1–30		5	
Do	July 1–31		28	
Malaga	June 29–Sept. 13	8	23	
Santander	Aug. 24–30		4	
Valencia	June 8–21	3		
Do	July 13–19	1		
Vigo	Aug. 17–23		1	
Straits Settlements:				
Singapore	May 4–24	2	1	
Sumatra:				
Medan	Jan. 1–31	5		
Switzerland:				
Berne	May 25–June 28	22		
Do	June 29–July 26	9		
Lucerne	Aug. 1–31	12		
Syria:				
Damascus	May 28–June 12	12		
Do	Aug. 7–13	6		
Tunis:				
Tunis	May 27–June 30	17	4	
Do	July 1–Sept. 1	9	12	
Turkey:				
Constantinople	June 1–7	1		
Do	Aug. 17–23	1		
Union of South Africa				Mar. 1–June 30, 1924: Cases, 167 (white, 15; native, 152), one death. June 29–July 31, 1924: 12 native deaths; 3 white cases.
Cape Province	May 4–31			Outbreaks.
Do	July 20–Aug. 16			Do.
East London	July 27–Aug. 2	1		
Orange Free State	May 4–10			Do.
Transvaal	May 4–31			Do.
Do	July 20–Aug. 16			Do.
Johannesburg	July 6–12	1		
Yugoslavia:				
Belgrade	July 28–Aug. 3	1		Do.
On vessels:				
S. S. Karoa	May 7	1		At Durban, South Africa, from Bombay, India. Vessel left Bombay Apr. 16, 1924. Patient, European.
S. S. Mount Evans	July 8	1		At Key West, Fla., from Manchester, England.

TYPHUS FEVER.

Algeria:				
Algiers	May 1–June 30	24	9	Year 1923: Cases, 1,166, of which 27 were in the military population.
Do	July 1–31	1		
Bolivia:				
La Paz	....do		1	
Brazil:				
Porto Alegre	June 1–7		1	
Bulgaria:				
Sofia	Aug. 17–23	1		
Chile:				
Antofagasta				June 16, 1924: 2 cases in Lazaretto.
Concepcion	May 20–26		3	
Do	July 8–21		3	
Iquique	June 22–28		1	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to October 10, 1924—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Chile—Continued.				
Talcahuano	May 25-31	2		
Do	June 29-Aug. 30	16	17	Aug. 30, 1924: 53 cases reported present.
Valparaiso	May 25-June 21		11	
Do	June 29-Aug. 30		27	
China:				
Antung	June 2-16	6		
Chungking	May 11-June 14			Present.
Chosen:				
Chemulpo	May 1-June 30	10		
Do	July 1-31	6	2	
Seoul	May 1-June 30	43	5	
Do	July 1-31	2		
Czechoslovakia				Apr. 1-June 30, 1924: Cases, 6.
State—				
Slovakia	Apr. 1-June 30	4		
Egypt:				
Alexandria	June 25-Aug. 5	4		
Cairo	Feb. 19-June 17	52	15	
Port Said	July 24-Aug. 5	3		
Esthonia				Apr. 1-June 30, 1924: Cases, 37. July 1-31, 1924: Cases, 2.
Germany:				
Coblenz	July 13-19	2		
Great Britain:				
England—				
St. Helens	Aug. 7-Sept. 11	12	3	One suspect case: July 10, 1924. Locality, vicinity of Liverpool. Last previous outbreak of typhus in England: At Birkenhead, Feb.-Mar., 1922: Cases, 12; deaths, 3.
Ireland—				
Dublin	June 8-14	1		
Do	July 13-19	1		
Lismore	July 19	1		
Longford	....do	1		
Greece:				
Saloniki	Apr. 20-May 4	6		
Iraq:				
Bagdad	Apr. 27-May 10	2		
Do	Aug. 3-9	1		
Japan				July 1-31, 1924: Cases, 2. Jan. 1-July 31, 1924: Cases, 8; deaths, 1.
Latvia				Apr. 1-June 30, 1924: Cases, 108.
City—				
Riga	June 1-30	1		
Mexico:				
Durango	July 1-31		2	
Guadalajara	May 1-June 30	2	2	
Mexico City	May 4-June 28	59		Including municipalities in Federal district.
Do	June 29-Sept. 6	75		Do.
Torreon	July 1-Aug. 31		4	
Palestine:				
Acre	Aug. 19-25	1		
Jaffa	June 17-23	1		
Do	July 8-Aug. 25	2		
Jerusalem	July 1-Aug. 25	5		
Kantara	July 15-21	1		
Khulde	Aug. 17	1		
Tiberias	Aug. 19-25	1		
Peru:				
Arequipa	Jan. 1-June 30		4	
Do	July 1-31		1	
Poland				Mar. 30-June 28, 1924: Cases, 2,947; deaths, 277.
Do				June 29-July 26, 1924: Cases, 265; deaths, 19.
Portugal:				
Oporto	June 15-21		1	
Russia				Jan. 1-31, 1924: 14,275 cases.
Moscow	July 27-Aug. 9	4		
Spain:				
Barcelona	July 10-16		1	
Malaga	Sept. 6-13		1	
Syria:				
Aleppo	June 8-14	1		
Damascus	July 14-20	1		
Tunis:				
Tunis	May 27-June 9	4		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 23 to October 10, 1924—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Turkey:				
Constantinople	May 18–June 21	7	2	
Do	July 6–Aug. 30	6	1	
Union of South Africa				Mar. 1–June 30, 1924: Cases, 418; deaths, 45. July 1–31, 1924: cases, 101; deaths, 19. (Colored, 93 cases; white, 8 cases.)
Cape Province				Mar. 1–June 30, 1924: Cases, 249; deaths, 23.
Do				July 1–31, 1924: Cases, 50; deaths, 6.
Natal				Mar. 1–June 30, 1924: Cases, 27; deaths, 5. July 1–31, 1924: Cases, 9.
Do	July 6–Aug. 2			Outbreaks.
Durban	Apr. 20–June 28	2		
Orange Free State				Mar. 1–June 30, 1924: Cases, 83; deaths, 11. July 1–31, 1924: Cases, 26; deaths, 11.
Transvaal				Mar. 1–May 31, 1924: Cases, 59; deaths, 5. July 1–31, 1924: Cases, 8; deaths, 2.
Johannesburg	May 11–24	2		
Do	June 29–July 26	2		

YELLOW FEVER.

Brazil:				
Pernambuco	May 11–17	2	1	
Salvador:				
San Salvador	June 10–Aug. 25			Present in San Salvador and vicinity.